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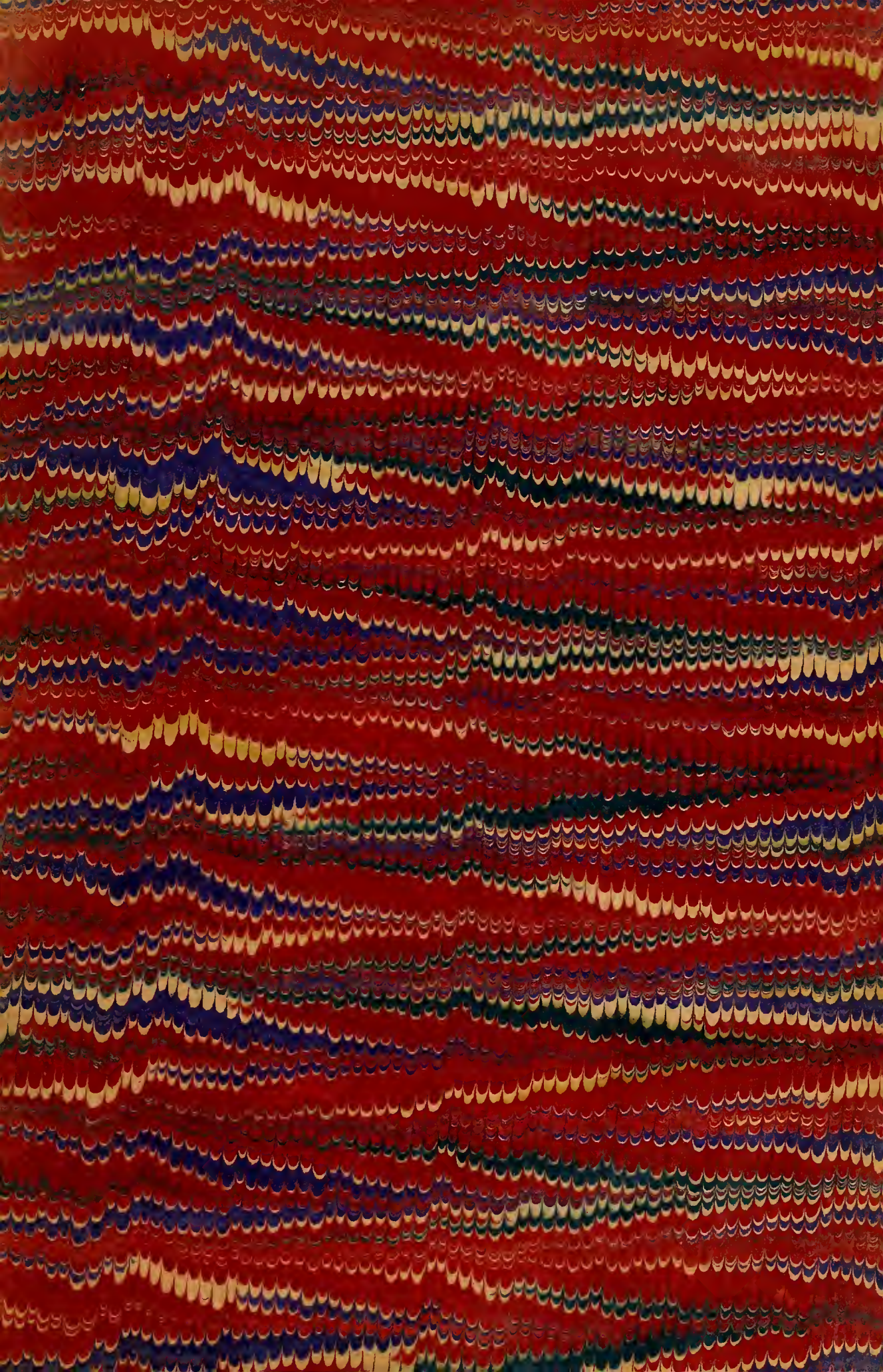
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UNITED STATES OF AMERICA.









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OFFICIAL GAZETTE

OF THE

UNITED STATES PATENT OFFICE.

S U P P L E M E N T

CONTAINING THE

REVISED CLASSIFICATION OF SUBJECTS OF INVENTION,

ARRANGED BY DIVISIONS,

AND

THE SUB-CLASSES ARRANGED ALPHABETICALLY.

JANUARY 1, 1895.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1895:



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DEPARTMENT OF THE INTERIOR,

UNITED STATES PATENT OFFICE,

Washington, D. C., January 1, 1895.

The following is the official classification of patents and inventions in the Patent Office. No changes will be made therein except by order of the Commissioner.

Should occasion arise for any modification of this classification, either by the discontinuance of any title or by the addition of a new one, the matter will be presented to the Commissioner for his action.

Examiners will not transfer patented drawings from one class or sub-class to another except on the Commissioner's approval.

Changes in classes and sub-classes will be published in the OFFICIAL GAZETTE.

JOHN S. SEYMOUR,

Commissioner of Patents.

SUBJECTS OF INVENTION.

Subjects of invention are divided into two hundred and thirteen classes, and assigned for examination to the thirty-four Examining Divisions of this Office, as follows:

DIVISION I.—EXAMINER FOX.

Classes.

- 39. Fences.
- 55. Harrows and Diggers.
- 97. Plows.
- 111. Seeders and Planters.
- 47. Trees, Plants, and Flowers.

DIVISION II.—EXAMINER I. V. TOWNSEND.

Classes.

- 6. Bee-Culture.
- 119. Care of Live Stock.
- 31. Dairy.
- 184. Lubricators.
- 185. Mechanical Motors.
- 100. Presses.
- 131. Tobacco.

DIVISION III.—EXAMINER BYRNES.

Classes.

- 148. Annealing and Tempering.
- 96. Coating with Metal.
- 204. Electro-Chemistry.
- 22. Metal-Founding.
- 75. Metallurgy.
- 207. Shaping Fluid Metal.

DIVISION IV.—EXAMINER POND.

Classes.

- 14. Bridges.
- 37. Excavating.
- 159. Fire Escapes and Ladders.
- 183. Fire-Proof Buildings.
- 61. Hydraulic Engineering.
- 189. Iron Structures.
- 72. Masonry.
- 104. Railways.
- 200. Towers.

DIVISION V.—EXAMINER LANE.

Classes.

- 11. Book-Binding.
- 41. Fine Arts.
- 63. Jewelry.
- 84. Music.
- 120. Stationery.

DIVISION VI.—EXAMINER LITTLEWOOD.

Classes.

- 8. Bleaching and Dyeing.
- 23. Chemicals.
- 52. Explosives.
- 71. Fertilizers.
- 167. Medicines.
- 95. Photography.
- 99. Preserving.
- 127. Sugar and Salt.
- 128. Surgery.

DIVISION VII.—EXAMINER SKINNER.

Classes.

- 46. Games and Toys.
- 56. Harvesters.
- 208. Velocipedes.

DIVISION VIII.—ACT. EXAM'R MCROBERTS.

Classes.

- 5. Beds.
- 155. Chairs.
- 156. Curtains, Shades, and Screens.
- 45. Furniture.
- 65. Kitchen and Table Articles.
- 211. Store Furniture.

DIVISION IX.—EXAMINER TRYON.

Classes.

- 4. Baths and Closets.
- 169. Fire-Extinguishers.
- 138. Hydraulic Motors.
- 103. Pumps.
- 182. Sewerage.
- 137. Water-Distribution.

DIVISION X.—EXAMINER SANDERS.

Classes.

- 21. Carriages and Wagons.

DIVISION XI.—EXAMINER HARMON.

Classes.

- 12. Boots and Shoes.
- 24. Clasps, Buckles, and Buttons.
- 54. Harness.
- 60. Hose and Belting.
- 69. Leather-Working Machinery.

DIVISION XII.—EXAM'R AUGHINBAUGH.

Classes.

- 192. Clutches.
- 193. Conveyers.
- 212. Cranes and Derricks.
- 187. Elevators.
- 57. Hoisting.
- 64. Journal-Boxes, Pulleys, and Shafting.
- 74. Machine Elements.
- 186. Store Service.

DIVISION XIII.—EXAMINER BLODGETT.

Classes.

- 86. Arms and Projectiles. Making
- 59. Chains, Staples, and Horseshoes.
- 30. Cutlery.
- 53. Hardware-Making.
- 10. Metal Bolts, Nuts, Rivets, and Screws.
- 77. Metal Boring and Drilling.
- 205. Metal-Drawing.
- 78. Metal-Forging.
- 80. Metal-Rolling.
- 76. Metal Tools and Implements. Making
- 134. Metal-Tube Manufacture.
- 82. Metal Turning, Planing, and Milling.
- 206. Metal-Welding.
- 85. Nails and Spikes.
- 163. Needles and Pins.
- 152. Wagon, Car, and Track Irons.

DIVISION XIV.—EXAMINER MAXSON.

Classes.

- 194. Coin-Controlled Apparatus.
- 168. Farriery.
- 153. Metal-Bending.
- 201. Metal-Ornamenting.
- 79. Metal Personal Wear. Making
- 164. Metal Punching and Shearing.
- 81. Metal-Working Tools.
- 151. Nut and Bolt Locks.
- 113. Sheet-Metal Ware. Making
- 140. Wire-Working.

DIVISION XV.—EXAMINER BRICKENSTEIN.

Classes.

- 106. Artificial Stone, Lime, and Cement.
- 107. Bread, Cracker, and Lozenge Making.
- 18. Caoutchouc and Minor Plastics.
- 25. Clay and Pottery.
- 154. Composite Roofings and Coverings.
- 44. Fuel.
- 49. Glass.
- 92. Paper-Making.
- 94. Paving.

DIVISION XVI.—EXAMINER BISSING.

Classes.

- 176. Electric Lighting.
- 177. Electric Signaling.
- 175. Electricity. Special applications.
- 178. Telegraphy.
- 179. Telephony.

DIVISION XVII.—EXAMINER RICE.

Classes.

- 93. Paper-Manufactures.
- 101. Printing.

DIVISION XVIII.—EXAMINER FOWLER.

Classes.

- 162. Injectors and Ejectors.
- 160. Steam and Vacuum Pumps.
- 122. Steam-Boilers.
- 110. Steam-Boiler Furnaces.
- 121. Steam-Engines.
- 136. Steam-Engine Valves.

DIVISION XIX.—EXAMINER STEWARD.

Classes.

- 126. Stoves and Furnaces.

DIVISION XX.—EXAMINER WILKINSON.

Classes.

- 3. Artificial Limbs.
- 16. Builders' Hardware.
- 32. Dentistry.
- 70. Locks and Latches.
- 109. Safes.
- 27. Undertaking.

DIVISION XXI.—EXAMINER HAINS.

Classes.

- 13. Brakes and Gins.
- 19. Carding.
- 26. Cloth-Finishing.
- 28. Cordage.
- 38. Felt and Fur.
- 66. Knitting and Netting.
- 117. Silk.
- 118. Spinning.
- 139. Weaving.

DIVISION XXII.—EXAMINER SEATON.

Classes.

- 9. Boats.
- 42. Firearms.
- 43. Fishing and Trapping.
- 115. Marine Propulsion.
- 89. Ordnance.
- 102. Projectiles.
- 114. Ships.
- 116. Signals.

DIVISION XXIII.—EXAMINER GREELEY.

Classes.

- 181. Acoustics.
- 33. Drafting.
- 58. Horology.
- 73. Measuring-Instruments.

DIVISION XXIV.—EXAMINER PIERCE.

Classes.

- 165. DESIGNS.
- 2. Apparel.
- 29. Crinoline and Corsets.
- 112. Sewing-Machines.
- 132. Toilet.
- 135. Umbrellas and Canes.

DIVISION XXV.—EXAMINER WYNNE.

Classes.

- 166. Artesian and Oil Wells.
- 17. Butchering.
- 83. Mills.
- 125. Stone-Working.
- 130. Thrashing.
- 146. Vegetable Cutters and Crushers.

DIVISION XXVI.—EXAM'R GEO. D. SEELY.

Classes.

- 173. Electricity. Conductors.
- 191. Electricity. Electric Railways.
- 171. Electricity. Generation.
- 174. Electricity. Medical and Surgical.
- 172. Electricity. Motive Power.

DIVISION XXVII.—EXAMINER GOULD.

Classes.

- 15. Brushing and Scrubbing.
- 51. Grinding and Polishing.
- 68. Laundry.
- 141. Washing Apparatus.

DIVISION XXVIII.—EX. W. W. TOWNSEND.

Classes.

- 123. Air and Gas Engines.
- 34. Driers.
- 98. Pneumatics.
- 62. Refrigeration.
- 170. Wind-Wheels.

DIVISION XXIX.—EXAMINER MORRIS.

Classes.

- 20. Carpentry.
- 147. Coopering.
- 108. Roofing.
- 157. Wheelwright-Machines.
- 143. Wood-Sawing.
- 142. Wood-Turning.
- 144. Wood-Working Machines.
- 145. Wood-Working Tools.

DIVISION XXX.—EXAMINER WOODWARD.

Classes.

- 67. Lamps and Gas-Fittings.
- 199. Linotyping.
- 198. Matrix-Making.
- 88. Optics.
- 197. Type-Writing Machines.

DIVISION XXXI.—EXAMINER ELY.

Classes.

- 195. Alcohol.
- 203. Ammonia, Water, and Wood Distillation.
- 202. Charcoal and Coke.
- 35. Educational Appliances.
- 50. Fluid-Pressure Regulators.
- 48. Gas.
- 149. Hides, Skins, and Leather.
- 196. Mineral Oils.
- 87. Oils, Fats, and Glue.
- 91. Painting.

DIVISION XXXII.—ACT. EX. WITHERSPOON.

Classes.

- 180. Accouterments.
- 40. Advertising.
- 190. Baggage.
- 209. Carbonating Beverages.
- 210. Packaging and Dispensing Liquids.
- 150. Packing and Storing Vessels.

DIVISION XXXIII.—EXAM'R F. A. SEELY.

Classes.

LABELS AND PRINTS.
TRADE-MARKS.

DIVISION XXXIV.—EXAMINER SIMPSON.

Classes.

- 188. Railway-Brakes.
- 213. Railway Draft-Appliances.
- 105. Railway Rolling-Stock.

CLASSES ALPHABETICALLY ARRANGED.

Div.	No.	Class.	Pats.	Div.	No.	Class.	Pats.
32	180	Accouterments	435	27	68	Laundry	7,633
23	181	Acoustics	401	11	69	Leather-working machinery	532
32	40	Advertising	1,922	30	139	Linotyping	98
28	123	Air and gas engines	1,025	20	70	Locks and latches	5,979
31	195	Alcohol	1,137	2	184	Lubricators	1,409
31	203	Ammonia, water, and wood distillation	255	12	74	Machine elements	4,785
3	148	Annealing and tempering	736	22	115	Marine propulsion	1,583
24	2	Apparel	5,479	4	72	Masonry	459
13	86	Arms and projectiles. Making	268	30	198	Matrix-making	114
25	166	Artesian and oil wells	1,771	23	73	Measuring-instruments	9,344
20	3	Artificial limbs	421	2	185	Mechanical motors	1,775
15	106	Artificial stone, lime, and cement	1,159	6	167	Medicines	1,332
32	190	Baggage	1,333	14	153	Metal-bending	658
9	4	Baths and closets	3,274	13	10	Metal bolts, nuts, rivets, and screws	2,396
2	5	Beds	5,014	13	77	Metal boring and drilling	1,242
2	6	Bee-culture	998	13	205	Metal-drawing	322
22	9	Bleaching and dyeing	1,525	13	78	Metal-forging	732
5	11	Boats	1,216	3	22	Metal-founding	2,310
11	12	Book-binding	2,566	3	75	Metallurgy	4,685
21	13	Boots and shoes	9,348	14	201	Metal-ornamenting	190
15	107	Brakes and gins	1,264	14	79	Metal personal wear. Making	461
4	14	Bread, cracker, and lozenge making	764	14	164	Metal punching and shearing	1,056
27	15	Bridges	951	13	80	Metal-rolling	1,167
20	16	Brushing and scrubbing	3,184	13	76	Metal tools and implements. Making	2,686
25	17	Builders' hardware	7,792	13	134	Metal-tube manufacture	433
15	18	Butchering	978	13	82	Metal turning, planing, and milling	2,012
32	209	Caoutchouc and minor plastics	1,864	13	206	Metal-welding	535
21	19	Carbonating beverages	278	14	81	Metal-working tools	3,265
2	119	Carding	1,320	25	83	Mills	9,720
29	20	Care of live stock	3,089	31	196	Mineral oils	666
10	21	Carpentry	3,717	5	84	Music	3,928
13	59	Carriages and wagons	20,096	13	85	Nails and spikes	1,523
8	155	Chains, staples, and horseshoes	842	13	163	Needles and pins	175
31	202	Chairs	4,389	14	151	Nut and bolt locks	1,540
6	23	Charcoal and coke	178	31	87	Oils, fats, and glue	1,836
11	24	Chemicals	1,143	30	88	Optics	1,445
15	25	Clasps, buckles, and buttons	11,795	22	89	Ordnance	954
12	192	Clay and pottery	3,090	32	210	Packaging and dispensing liquids	1,262
3	96	Cloth-finishing	659	32	150	Packing and storing vessels	10,854
14	194	Clutches	1,535	31	91	Painting	2,043
15	154	Coating with metal	454	15	92	Paper-making	3,307
12	193	Coin-controlled apparatus	818	17	93	Paper-manufactures	3,381
29	147	Composite roofings and coverings	665	15	94	Paving	1,090
21	28	Conveyers	1,167	6	95	Photography	1,481
21	212	Coopers	670	1	97	Plows	10,122
24	29	Cordage	1,549	28	98	Pneumatics	3,647
24	29	Cranes and derricks	596	6	99	Preserving	1,541
8	156	Crinoline and corsets	1,506	2	100	Presses	3,798
13	30	Curtains, shades, and screens	2,435	17	101	Printing	5,833
2	31	Cutlery	2,103	22	102	Projectiles	2,076
20	32	Dairy	4,435	9	103	Pumps	4,240
23	33	Dentistry	1,283	34	128	Railway-brakes	2,667
23	33	Designs	697	34	213	Railway draft appliances	6,780
23	34	Drafting	2,481	34	105	Railway rolling-stock	5,827
26	171	Driers	793	4	104	Railways	8,334
26	171	Educational appliances	2,058	28	62	Refrigeration	3,408
26	173	Electricity. Conductors	1,751	30	109	Roofing	1,182
26	174	Electricity. Electric railways	2,927	1	111	Safes	490
26	174	Electricity. Generation	333	9	182	Seeders and planters	7,477
26	175	Electricity. Medical and surgical	1,061	24	112	Sewerage	281
16	175	Electricity. Motive-power	3,493	3	207	Sewing-machines	6,048
16	176	Electricity. Special applications	3,346	14	113	Shaping fluid metal	235
16	177	Electric lighting	1,781	22	114	Sheet-metal ware. Making	2,266
3	204	Electric signaling	2,963	22	116	Ships	2,743
12	187	Electro-chemistry	1,639	21	117	Signals	2,662
4	37	Elevators	2,165	21	118	Silk	106
6	52	Excavating	500	5	120	Spinning	2,298
14	168	Explosives	1,234	18	130	Stationery	4,532
21	38	Farmery	771	18	122	Steam and vacuum pumps	227
6	71	Felt and fur	6,807	18	110	Steam-boilers	5,883
5	41	Fences	424	18	131	Steam-boiler furnaces	2,947
22	42	Fertilizers	1,500	18	132	Steam-engines	8,237
4	159	Fine arts	4,356	25	135	Steam-engine valves	2,465
9	169	Firearms	2,487	8	211	Stone-working	2,188
4	183	Fire escapes and ladders	1,023	12	186	Store furniture	1,323
22	43	Fire extinguishers	455	19	126	Store service	690
31	50	Fireproof buildings	2,667	6	127	Stoves and furnaces	18,340
15	44	Fishing and trapping	802	6	128	Sugar and salt	2,401
8	45	Fluid-pressure regulators	636	16	178	Surgery	3,335
7	46	Fuel	4,854	16	179	Telegraphy	3,075
31	48	Furniture	4,453	25	130	Telephony	2,297
15	49	Games and toys	3,060	2	131	Threshing	4,130
27	51	Gas	1,351	24	132	Tobacco	2,274
13	53	Glass	2,598	4	200	Toilet	826
11	54	Grinding and polishing	1,395	1	47	Towers	473
1	55	Hardware-making	7,400	30	197	Trees, plants, and flowers	994
7	56	Harness	4,691	24	135	Type-writing machines	1,112
31	149	Harrows and diggers	10,155	30	27	Umbrellas and canes	947
12	57	Harvesters	1,091	25	146	Undertaking	630
23	58	Hides, skins, and leather	5,558	7	208	Vegetable cutters and crushers	2,005
11	60	Hoisting	3,640	13	152	Velocipedes	2,388
4	61	Hose and belting	1,002	27	141	Wagon, car, and track irons	1,074
9	138	Hydraulic engineering	1,146	9	137	Washing apparatus	652
18	162	Hydraulic motors	2,572	21	139	Water-distribution	7,707
4	189	Injectors and ejectors	540	29	157	Weaving	3,732
5	63	Iron structures	524	28	170	Wheelwright-machines	310
12	64	Jewelry	1,106	14	140	Wind-wheels	1,485
8	65	Journal-boxes, pulleys, and shafting	4,352	29	143	Wire-working	1,449
21	66	Kitchen and table articles	1,747	29	142	Wood-sawing	4,209
30	67	Knitting and netting	1,580	29	144	Wood-turning	756
		Lamps and gas-fittings	8,211	29	145	Wood-working machines	5,524
						Wood-working tools	4,235

CLASSES NUMERICALLY ARRANGED.

No.	Class.	Div.	No.	Class.	Div.
2	Apparel.....	24	107	Bread, cracker, and lozenge making.....	15
3	Artificial limbs.....	20	108	Roofing.....	29
4	Baths and closets.....	9	109	Safes.....	20
5	Beds.....	8	110	Steam-boiler furnaces.....	18
6	Bee-culture.....	2	111	Seeders and planters.....	1
8	Bleaching and dyeing.....	6	112	Sewing-machines.....	24
9	Boats.....	22	113	Sheet-metal ware. Making.....	14
10	Metal bolts, nuts, rivets, and screws.....	13	114	Ships.....	22
11	Book-binding.....	5	115	Marine propulsion.....	22
12	Boots and shoes.....	11	116	Signals.....	22
13	Brakes and gins.....	21	117	Silk.....	21
14	Bridges.....	4	118	Spinning.....	21
15	Brushing and scrubbing.....	27	119	Care of live stock.....	2
16	Builders' hardware.....	20	120	Stationery.....	5
17	Butchering.....	25	121	Steam-engines.....	18
18	Caoutchouc and minor plastics.....	15	122	Steam-boilers.....	18
19	Carding.....	21	123	Air and gas engines.....	23
20	Carpentry.....	29	125	Stone-working.....	25
21	Carriages and wagons.....	10	126	Stoves and furnaces.....	19
22	Metal-founding.....	3	127	Sugar and salt.....	6
23	Chemicals.....	6	128	Surgery.....	25
24	Clasps, buckles, and buttons.....	11	130	Threshing.....	2
25	Clay and pottery.....	15	131	Tobacco.....	24
26	Cloth-finishing.....	21	132	Toilet.....	3
27	Undertaking.....	20	134	Metal-tube manufacture.....	24
28	Cordage.....	21	135	Umbrellas and canes.....	18
29	Crinoline and corsets.....	24	136	Steam-engine valves.....	9
30	Cutlery.....	13	137	Water-distribution.....	9
31	Dairy.....	2	138	Hydraulic motors.....	21
32	Dentistry.....	20	139	Weaving.....	14
33	Drafting.....	23	140	Wire-working.....	27
34	Driers.....	28	141	Washing apparatus.....	29
35	Educational appliances.....	31	142	Wood-turning.....	29
37	Excavating.....	4	143	Wood-sawing.....	29
38	Felt and fur.....	21	144	Wood-working machines.....	25
39	Fences.....	1	145	Wood-working tools.....	29
40	Advertising.....	32	146	Vegetable cutters and crushers.....	3
41	Fine arts.....	5	147	Coopering.....	31
42	Firearms.....	22	148	Annealing and tempering.....	31
43	Fishing and trapping.....	22	149	Hides, skins, and leather.....	32
44	Fuel.....	15	150	Packing and storing vessels.....	14
45	Furniture.....	8	151	Nut and bolt locks.....	13
46	Games and toys.....	7	152	Wagon, car, and track irons.....	14
47	Trees, plants, and flowers.....	1	153	Metal-bending.....	15
48	Gas.....	31	154	Composite roofings and coverings.....	8
49	Glass.....	15	155	Chairs.....	29
50	Fluid-pressure regulators.....	31	156	Curtains, shades, and screens.....	4
51	Grinding and polishing.....	27	157	Wheelwright-machines.....	9
52	Explosives.....	6	159	Fire escapes and ladders.....	26
53	Hardware-making.....	13	160	Steam and vacuum pumps.....	26
54	Harness.....	11	162	Injectors and ejectors.....	16
55	Harrows and diggers.....	1	163	Needles and pins.....	16
56	Harvesters.....	7	164	Metal punching and shearing.....	16
57	Hoisting.....	12	165	Designs.....	25
58	Horology.....	23	166	Artesian and oil wells.....	6
59	Chains, staples, and horseshoes.....	13	167	Medicines.....	14
60	Hose and belting.....	11	168	Farriery.....	9
61	Hydraulic engineering.....	4	169	Fire-extinguishers.....	28
62	Refrigeration.....	28	170	Wind-wheels.....	26
63	Jewelry.....	5	171	Electricity. Generation.....	26
64	Journal-boxes, pulleys, and shafting.....	12	172	Electricity. Motive-power.....	26
65	Kitchen and table articles.....	8	173	Electricity. Conductors.....	26
66	Knitting and netting.....	21	174	Electricity. Medical and surgical.....	16
67	Lamps and gas-fittings.....	30	175	Electricity. Special applications.....	16
68	Laundry.....	27	176	Electric lighting.....	16
69	Leather-working machinery.....	11	177	Electric signaling.....	16
70	Locks and latches.....	20	178	Telegraphy.....	16
71	Fertilizers.....	6	179	Telephony.....	23
72	Masonry.....	4	180	Accouterments.....	9
73	Measuring-instruments.....	23	181	Acoustics.....	4
74	Machine elements.....	12	182	Sewerage.....	12
75	Metallurgy.....	3	183	Fireproof buildings.....	4
76	Metal tools and implements. Making.....	13	184	Lubricators.....	2
77	Metal boring and drilling.....	13	185	Mechanical motors.....	12
78	Metal-forging.....	13	186	Store service.....	34
79	Metal personal wear. Making.....	14	187	Elevators.....	4
80	Metal-rolling.....	13	188	Railway-brakes.....	32
81	Metal-working tools.....	14	189	Iron structures.....	26
82	Metal turning, planing, and milling.....	13	190	Baggage.....	12
83	Mills.....	25	191	Electricity. Electric railways.....	12
84	Music.....	5	192	Clutches.....	14
85	Nails and spikes.....	13	193	Conveyers.....	31
86	Arms and projectiles. Making.....	13	194	Coin-controlled apparatus.....	31
87	Oils, fats, and glue.....	31	195	Alcohol.....	31
88	Optics.....	30	196	Mineral oils.....	30
89	Ordnance.....	22	197	Type-writing machines.....	30
91	Painting.....	31	198	Matrix-making.....	30
92	Paper-making.....	15	199	Linotyping.....	4
93	Paper-manufactures.....	17	200	Towers.....	14
94	Paving.....	15	201	Metal-ornamenting.....	31
95	Photography.....	6	202	Charcoal and coke.....	31
96	Coating with metal.....	3	203	Ammonia, water, and wood distillation.....	3
97	Plows.....	1	204	Electro-chemistry.....	3
98	Pneumatics.....	28	205	Metal-drawing.....	3
99	Preserving.....	6	206	Metal-welding.....	3
100	Presses.....	2	207	Shaping fluid metal.....	7
101	Printing.....	17	208	Velocipedes.....	32
102	Projectiles.....	22	209	Carbonating beverages.....	32
103	Pumps.....	9	210	Packaging and dispensing liquids.....	8
104	Railways.....	4	211	Store furniture.....	12
105	Railway rolling-stock.....	34	212	Cranes and derricks.....	34
106	Artificial stone, lime, and cement.....	15	213	Railway draft appliances.....	

DIVISION I.

EXAMINER FOX.

CLASSES.—39, Fences; 55, Harrows and Diggers; 97, Plows; 111, Seeders and Planters; 47, Trees, Plants, and Flowers.

CLASS 39.—FENCES. (1.)

Sub-classes.

Fences—	Gates—	Openers—
1. Barbed—	92. Car-door,	92. Car-door,
70. Linked,	93. Car-platform door,	93. Car-platform door,
102. Ribbon,	96. Hatch,	96. Hatch,
71. Visible,	94. Sliding door,	94. Sliding door,
64. Cat-guards,	95. Swinging door,	95. Swinging door,
65. Earth and plastic,	97. Window,	97. Window,
4. Flood,	23. Oscillating,	23. Oscillating,
6. Iron,	11. Railway—	11. Railway—
9. Wire—	42. Cattle-guard,	42. Cattle-guard,
72. Fabric,	38. Electric,	38. Electric,
12. Fasteners—	36. Mast—	36. Mast—
76. Clamps,	35. Automatic,	35. Automatic,
77. Hook-nails and staples,	41. Platform-guard,	41. Platform-guard,
73. Picket,	37. Pneumatic,	37. Pneumatic,
74. Stays—	39. Rocking,	39. Rocking,
78. Linked,	44. Sliding,	44. Sliding,
79. Lock-plates,	43. Swinging,	43. Swinging,
75. Strands,	40. Vertically-moving,	40. Vertically-moving,
45. Stretchers, Permanent—	7. Sliding—	7. Sliding—
46. Compensators,	29. Lever-openers,	29. Lever-openers,
47. Mid-wire-take-ups,	28. Pulley or rack openers,	28. Pulley or rack openers,
48. Path-closers,	30. Suspended,	30. Suspended,
49. Post-winders—	31. Vibrating tracks,	31. Vibrating tracks,
50. Vertical,	32. Sliding and swinging—	32. Sliding and swinging—
51. Stretchers, Removable—	33. Hinged-roller,	33. Hinged-roller,
52. Clutch-bars,	34. Suspensing frames,	34. Suspensing frames,
53. Grips,	8. Swinging—	8. Swinging—
54. Levers—	18. Folding-panel,	18. Folding-panel,
55. Attached,	14. Hand-openers,	14. Hand-openers,
56. Loopers,	20. Load-openers,	20. Load-openers,
57. Rack-bars,	17. Rotary,	17. Rotary,
58. Ratchet-bars,	16. Self-closers,	16. Self-closers,
59. Reel-carriers,	25. Tilting,	25. Tilting,
63. Screw,	19. Vertically-adjustable,	19. Vertically-adjustable,
60. Tonge,	13. Tilting,	13. Tilting,
61. Twin-hooks,	26. Folding-panel,	26. Folding-panel,
62. Windlasses,	99. Turnstiles,	99. Turnstiles,
66. Wood—	100. Wire gates,	100. Wire gates,
80. Panel—	101. Wire gates, frameless.	101. Wire gates, frameless.
83. Suspended,	Posts—	Posts—
84. Worm,	Bases—	Bases—
81. Picket—	86. Metal,	86. Metal,
85. Panel,	87. Plastic,	87. Plastic,
82. Tied,	88. Wood,	88. Wood,
5. Gates—	Braces—	Braces—
15. Compound,	89. Lateral,	89. Lateral,
24. Dropping,	90. Longitudinal,	90. Longitudinal,
21. Expanding,	67. Metal,	67. Metal,
98. Fire-guards,	68. Plastic,	68. Plastic,
22. Jump,	69. Wood,	69. Wood,
Openers—		
91. Cab-door,		

CLASS 55.—HARROWS AND DIGGERS. (1.)

Sub-classes.

1. Clod-crushers—	4. Harrow-teeth—
21. Barred and corrugated rollers,	35. Spike,
22. Drag-bars,	36. Spring,
23. Drag bars and harrows,	37. Trailing and draw-ent,
24. Toothed rollers and wheels.	5. Hoes—
2. Forks—	38. Adjustable,
25. Adjustable heads,	39. Compound,
26. Combined forks and shovels.	40. Adjustable,
27. Fodder-forks,	41. Horizontal,
28. Potato forks and shovels.	42. Adjustable,
3. Harrows—	43. Interchangeable,
Changeable-form,	44. Toothed blades,
30. Disk,	45. Weeding,
31. Expandible,	6. Land-rollers—
32. Flexible,	46. Furrows and markers,
11. Revolving,	47. Pivoted,
13. Rotary,	48. Weighted cylinders,
33. Spring-tooth,	49. Weighted frames,
34. Tooth-cleaners,	7. Pivoted teeth,
19. Wheel—	8. Pivoted tooth-bars.
73. Disk,	9. Potato-diggers—
20. Rotary,	50. Bearing-wheel separators,
74. Spring,	51. Endless-carrier—
75. Trailing teeth.	52. Receptacles,
	54. Plow and screen,
	53. Plow-clearers,
	55. Plow, vibrating screens,

CLASS 55.—Continued.

Potato-diggers—	Stalk-choppers—
57. Screen-cylinders,	64. Vine-cutters.
56. Sifting-wheels, side-delivery,	65. Stalk-pullers, hand,
58. Spiral conveyers,	66. Wheel.
59. Toothed drum.	17. Stone-gatherers.
10. Rakes.	18. Transplanters—
12. Rollers and harrows.	67. Dibbles,
14. Shovels.	68. Pivoted jaws,
15. Stalk-choppers—	70. Post-hole diggers,
60. Draw-cut,	71. Post-hole diggers, pivoted jaws,
63. Reciprocating,	69. Sliding jaws,
61. Revolving, horizontal,	72. Wheel-machines.
62. Vertical,	

CLASS 97.—PLOWS. (1.)

Sub-classes.

1. Attachments—	11. Cultivator-teeth.
44. Harrow.	13. Fenders.
2. Beams.	14. Gage wheels and runners.
3. Cleaners.	15. Handles.
4. Clevises.	17. Landsides.
6. Colters—	18. Mold boards—
43. Rolling.	23. Revolving.
5. Corn-coverers.	21. Plows—
8. Cotton-choppers.	12. Ditching,
9. Cotton-scrapers.	19. Mole,
7. Couplings.	40. Revolving,
10. Cultivators—	26. Shovel,
41. Hand—	27. Side-hill,
42. Wheel,	30. Steam,
20. Parallel,	36. Wheel.
37. Revolving,	22. Points.
38. Rolling,	24. Ridgers.
25. Rotary—	28. Sod-cutters.
39. Horizontal,	29. Standards.
31. Straddle-row,	32. Subsoilers.
34. Wheel—	33. Weed-turners.
35. Straddle-row,	

CLASS 111.—SEEDERS AND PLANTERS. (1.)

Sub-classes.

1. Broadcast—	19. Grain-drill cleaners.
2. Hand,	24. Land-markers.
3. Revolving hoppers,	25. Pivoted seed-cups.
4. Walking.	Planters—
5. Check-row.	6. Corn,
8. Cnps on belt.	7. Cotton,
9. Cnps on disk.	16. Foot,
Drills—	20. Hand—
35. Adjustable rank,	21. Oscillating,
18. Grain,	22. Reciprocating,
36. Walking,	23. Rotating,
10. Drills and broadcast combined.	27. Potato—
11. Drill-teeth.	28. Walking,
12. Elastic feed-wheels.	32. Walking—
34. Fertilizer-distributers—	33. Vibrating heppers.
13. Hand,	26. Plungers.
14. Revolving hoppers,	29. Preparing seed.
15. Walking.	37. Rolling hoppers.
17. Force-feed.	31. Screw-feed.

CLASS 47.—TREES, PLANTS, AND FLOWERS. (1.)

Sub-classes.

15. Blanching.	28. Root-guards.
16. Dress attachments.	29. Sap-buckets.
17. False stems.	11. Sap-spouts.
18. Flower-holders.	30. Seed-testers.
19. Flower-pots.	31. Stays and props.
20. Flower-work.	32. Strawberry-growing.
21. Garden-beds.	33. Tree-covering.
6. Grafting.	34. Transplanting-pots.
22. Hand-screens.	35. Trap-belts.
23. Hanging baskets.	36. Treatment—
13. Hedge-training.	37. Implements.
7. Hop-culture.	12. Trellises.
24. Lawn-vases.	38. Trunk-guards, cattle—
27. Plant frames and houses.	39. Vermin.
25. Plant-stands—	40. Turpentine-gathering.
26. Revolving.	41. Window-gardens.

DIVISION II.

EXAMINER I. U. TOWNSEND.

CLASSES.—6, Bee-Culture; 119, Care of Live Stock; 31, Dairy; 184, Lubricators; 185, Mechanical Motors; 100, Presses; 131, Tobacco.

CLASS 6.—BEE-CULTURE. (II.)

Sub-classes.

- | | |
|---------------|---------------------|
| 1. Bee-hives. | 2. Hive-appliances. |
|---------------|---------------------|

CLASS 119.—CARE OF LIVE STOCK. (II.)

Sub-classes.

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|-----------------------------------|---------------------------------|
| Animal-stocks— | 5. Poultry-culture. |
| 14. Hog-traps, | 19. Sheep-protectors. |
| 15. Horse and cattle, | 9. Stanchions. |
| 16. Sheep. | Steading and feeding— |
| 46. Bird cages and bouses. | 20. Calf-feeders, |
| 17. Catching and holding tools. | 21. Combined troughs and racks, |
| 48. Currycombs. | 22. Feed-racks, |
| 47. Gags and muzzles. | 23. Feed-troughs, |
| 18. Gangways. | 52. Nose-bags, |
| 3. Grooming. | 24. Releasing devices, |
| 49. Hitching-posts and tics. | 25. Stall-floors, |
| 51. Hopples. | 26. Stalls, sheds, and pens. |
| 4. Incubators. | 53. Stock-cars. |
| 54. Manure-ponches. | 27. Stock-sorters. |
| 13. Nose-rings and ringing-tools. | 50. Tethers. |
| 12. Pokes. | |

CLASS 31.—DAIRY. (II.)

Sub-classes.

- | | |
|---|-----------------------------|
| Butter and cheese— | Churns— |
| 24. Cutters, | 42. Rotary— |
| 23. Manufacture of. | Vertical single-dasher, |
| 25. Butter workers and molds. | Vertical double-dasher— |
| 20. Centrifugal creamers. | 43. Concentric shafts, |
| 21. Cheese-hoops. | 44. Parallel shafts, |
| 26. Cheese-turners. | 17. Vibrating, |
| 22. Cheese-vats and curd-breakers. | 18. Working body. |
| 7. Churns— | 8. Cow-milkers. |
| 9. Double-acting, | 27. Cream-pumps. |
| Reciprocating, | 63. Drink-mixers. |
| Crank mechanism— | 57. Egg-beaters— |
| Multiple-dasher, | 61. Reciprocating, |
| 30. Single-dasher, | 59. Rotary multiple-dasher— |
| 31. Combined lever and crank mechanism, | 58. Single-dasher, |
| 32. Foot mechanism, | 60. Vibrating. |
| 33. Hand and foot mechanism, | Milk-coolers— |
| Lever mechanism— | 45. Aerating, |
| Multiple-dasher, | 46. Creaming-cans— |
| 35. Single-dasher, | 47. Agitators, |
| 36. Rocking-seat mechanism, | 48. Depending-tube, |
| 37. Without operating mechanism, | 49. Floats, |
| Rotary— | 50. Vacuum creamers, |
| Diagonal-dasher, | 51. Vertical-tube, |
| 39. Horizontal single-dasher, | 52. Milk-circulation, |
| Horizontal double-dasher— | 53. Vats— |
| Concentric shafts, | 54. Air-circulation, |
| 41. Parallel shafts, | 55. Horizontal-tube, |
| | 56. Removable-pipe. |
| | 13. Milk-stools. |
| | 14. Pails and strainers. |
| | 28. Tables and racks. |

CLASS 184.—LUBRICATORS. (II.)

Sub-classes.

- | | |
|-------------------------------|-----------------------|
| 1. Capillary attraction. | 4. Gravity-feed— |
| 2. Condensation displacement. | 5. Automatic cut-off. |
| 3. Force-feed. | 6. Liquefiers. |
| | 8. Miscellaneous. |

CLASS 185.—MECHANICAL MOTORS. (II.)

Sub-classes.

- | | |
|------------------|-------------------|
| 1. Horse-powers— | 5. Miscellaneous. |
| 2. Equalizers, | 6. Spring. |
| 3. Treads. | 7. Weight. |
| 4. Manual. | |

CLASS 100.—PRESSES. (II.)

Sub-classes.

- | | |
|--|------------------------------------|
| Baling— | Copying— |
| 1. Belt and roller. | 59. Fluid-pressure, |
| Plunger— | 60. Hand-impressing, |
| 2. Cam, | 61. Hand-impressing, book-flexure, |
| 3. Crank and pitman, | 62. Roller mechanism. |
| 4. Lever, | Expressing— |
| 5. Rack bar and pinion, | 35. Belt, |
| 6. Ratchet and grapple bar, | 36. Belt and plunger, |
| 7. Rebounding, | 37. Belt and roller, |
| 8. Screw, | 38. Disk. |
| 9. Toggle-joint, | Plunger— |
| 10. Toggle-joint, inverted, | 39. Cam, |
| 11. Thrust-bar, | 40. Crank and pitman, |
| 12. Windlass. | 41. Lever, |
| 13. Screw. | 42. Rack bar and pinion, |
| Articles and attachments— | 43. Ratchet and grapple bar, |
| 14. Bales and bale-covers, | 44. Screw, |
| 15. Bale-band tighteners, | 45. Toggle-joint, |
| 16. Bale-ejectors, | 46. Windlass. |
| 20. Binders, | 47. Roller. |
| 19. Boxes and frames, | 48. Screw. |
| 21. Brakes, | 49. Without operating mechanism. |
| 22. Condensers, | Articles and attachments— |
| 23. Discharge-end contracting devices, | 50. Boxes and frames, |
| 24. Division-blocks and block-inserters, | 51. Cake-formers, |
| 25. Feeders, | 52. Cake-strippers, |
| 27. Indicators, | 53. Cake-trimmers, |
| 28. Movable bale-boxes, | 54. Mats. |
| 29. Plungers, | Packing— |
| 30. Retainers. | 55. Cheese, |
| Bundling— | 56. Continuous-compression, |
| 31. In lengths, | 57. Single-compression, |
| 32. In lengths, shingles, | 58. Silos. |
| 33. Wool. | |
| 34. Can-filling machines. | |

CLASS 131.—TOBACCO. (II.)

Sub-classes.

- | | |
|---|--------------------------------|
| 37. Cigar and cigarette cutters. | 60. Leaf-treating— |
| 18. Cigar-bundling. | 56. Booking. |
| 38. Cigar-cutters, tip. | 57. Stemming. |
| 5. Cigar-machines— | 58. Stem-crushing. |
| 39. Adjuncts, | 30. Moistening. |
| 40. Apron— | 9. Molding cigars. |
| 41. Moving rolling-table, | 10. Mouthpieces. |
| 42. Stationary rolling-table, | 11. Packing. |
| 43. Endwise-moving filler, | 13. Pipe-cleaners. |
| 44. One traveling apron, | 12. Pipes and stems. |
| 45. Roller, | 14. Plug-making. |
| 46. Two traveling aprons. | 15. Plugs. |
| 47. Cigar-machine aprons. | 31. Smoking-tobacco. |
| 48. Cigar-makers' implements— | 22. Smoking-tubes. |
| 49. Wrapper-cutters. | 16. Snuff manufacture. |
| 20. Cigar-perforators. | Tobacco-cutters— |
| 51. Cigar supports and stands. | 23. Pivoted-knife, |
| 52. Cigars, cigarettes, and cartridges. | 34. Reciprocating-knife, |
| 6. Curing. | 35. Rotating-knife. |
| 55. Dressing, casing, and flavoring. | 21. Tobacco-hangers. |
| 7. Granulating. | 59. Tobacco-users' appliances. |
| | 36. Wrappers. |

DIVISION III.

EXAMINER BYRNES.

CLASSES.—148, Annealing and Tempering; 96, Coating with Metal; 204, Electro-Chemistry; 22, Metal-Founding; 75, Metallurgy; 207, Shaping Fluid Metal.

CLASS 148.—ANNEALING AND TEMPERING. (III.)

Sub-classes.

- | | |
|-------------------------------------|----------------------------------|
| 13. Annealing apparatus— | Glass-annealing— |
| 14. Boxes and pots, | 28. Flattening-tables, |
| 15. Clamps, | 29. Hearths, |
| 16. Muffles, | 30. Leers— |
| 17. Ovens— | 31. Grids, |
| 18. Rotary hearths, | 32. Muffles, |
| 19. Pits, | 33. Processes. |
| 20. Wire and springs, | 34. Hardening apparatus— |
| 21. Annealing processes— | 35. Bands and wire, |
| 22. Drawing temper, | 36. Clamps. |
| 23. Gas, | 37. Hardening processes— |
| 24. Toughening. | 39. Molten metal, |
| 40. Cementation and case-hardening— | 38. Solutions. |
| 25. Compounds, | Tempering and annealing— |
| 26. Gaseous, | 10. Applications of electricity, |
| 27. Liquid. | 12. Metals other than iron. |
| 8. Decarbonizing. | |

CLASS 96.—COATING WITH METAL. (III.)

Sub-classes.

- | | |
|----------------------------|-------------------|
| 2. Galvanizing. | 8. Precipitating. |
| 9. Iron oxides. | 7. Tinning. |
| 11. Pickling and swilling. | 10. Wipers. |

CLASS 204.—ELECTRO-CHEMISTRY. (III.)

Sub-classes.

- | | |
|----------------------------|---------------------------|
| Batteries— | Electrolysis— |
| 49. Anodes, | 5. Aqueous bath— |
| 50. Cathodes, | 6. Apparatus, |
| 52. Connectors, | 6. Cathodes— |
| 51. Diaphragms, | 7. Cleaning, |
| 47. Earth, | 8. Metallizing, |
| 48. Gas, | 9. Chemicals, |
| 33. One-fluid— | 10. Copper, |
| 34. Zinc— | 11. Depolarizing and bur- |
| 35. Nitrates, | nishing, |
| 36. Sulphates, | 12. Gold, |
| 37. Chromates, | 13. Multiple, |
| 38. Oxides, | 14. Nickel, |
| 39. Chlorides, | 15. Ores, |
| 40. Two-fluid— | 16. Silver, |
| 41. Zinc— | 17. Tin, |
| 42. Nitrates, | 18. Zinc. |
| 43. Sulphates— | 22. Bleaching, |
| 44. Gravity, | 23. Diaphragms, |
| 45. Chromates, | 19. Fused bath— |
| 46. Piles, | 20. Aluminium, |
| 29. Secondary— | 21. Sodium, |
| 30. Charging and discharg- | 24. Purifying liquids— |
| ing, | 26. Alcohol, |
| 53. Vessels. | 25. Water, |
| Electrolysis— | 27. Tanning. |
| 1. Aqueous bath— | Synthesis— |
| 2. Alloys, | 31. Synthesis— |
| 3. Aluminium, | 32. Ozone. |
| 4. Anodee, | |

CLASS 22.—METAL-FOUNDING. (III.)

Sub-classes.

- | | |
|--------------------------------|---------------------------------|
| Metal molds— | Metal molds— |
| 1. Apparatus and plants, | 50. Tools. |
| 2. Chains, hinges, and joints, | 23. Vehicle-wheels. |
| 4. Hardware, | 24. Wheels. |
| 5. Hollow ware. | 25. Chains, hinges, and joints, |
| 7. Ingots— | 26. Hardware, |
| 9. Compound, | 27. Hollow ware, |
| 6. Hollow and tube, | Molded molds— |
| 10. Plants, | 28. Molded molds. |
| 53. Strippers. | 8. Molders' flasks. |
| 52. Ladles. | 29. Materials. |
| 11. Materials. | 17. Tools and arts. |
| 12. Ordnance and projectiles. | 30. Ordnance and projectiles. |
| 13. Pigs. | 31. Pipes— |
| 14. Plows. | 32. Horizontal. |
| 15. Rolls. | 3. Pipe-elbows. |
| 18. Screw-threads. | 33. Plants. |
| 16. Soft-metal machines— | 34. Plows. |
| 21. Molds, | 35. Rolls. |
| 19. Shot, | 36. Screw-threads. |
| 20. Spoons, | 37. Tools. |
| 22. Traps, | 38. Vehicle-wheels. |
| 51. Type. | 39. Wheels. |

CLASS 22.—Continued.

Molding Apparatus—

40. Blacking-molds,
41. Hollow ware,
42. Machines,
43. Ordnance and projectiles.
44. Pipes—
45. Horizontal.

Molding apparatus—

46. Pipe-cores.
47. Screw-threads.
48. Vehicle-wheels.
49. Wheels.
Rotary molds—
50. Rotary molds.

CLASS 75.—METALLURGY. (III.)

Sub-classes.

- | | |
|-------------------------------|-------------------------------|
| 1. Alloys. | 22. Quicksilver. |
| 2. Assaying. | 17. Reducing and separating— |
| 90. Blowpipes. | 58. Aluminium, |
| 3. Converters— | 57. Apparatus, |
| 148. Fixed, | 62. Copper, |
| 149. Furnace, | 59. Desilverizing lead, |
| 150. Runway, | 60. Desulphurizing ores, |
| 151. Sectional, | 61. Disintegrating ores, |
| 152. Tuyeres and bottoms. | 63. Flux, |
| 182. Crucibles. | 64. Gold and silver, |
| 107. Cnpolas— | 85. Manganese, |
| 108. Drop-bottoms, | 66. Nickel and cobalt, |
| 109. Fore-hearths, | 65. Ore bricks, |
| 110. Water-jackets, | 183. Sodium. |
| 111. Wind-chests and tuyeres. | Regenerators— |
| 112. Finery-fires. | 95. Double-surface, |
| 113. Fire-brick. | 94. Single-surface. |
| 30. Fume-arresters. | Roasters— |
| Furnaces— | 133. Blasting, |
| 40. Blank— | 134. Hearths— |
| 184. Tire, | 135. Rotary, |
| 5. Blast— | 136. Kilns, |
| 114. Charging devices— | 137. Muffles, |
| 115. Bell and hopper, | Revolving— |
| 116. Protecting walls, | 138. Cylinders, |
| 97. Tuyeres, | 139. Retorts, |
| 117. Tymps and slag-spouts, | 140. Shaft-and-shelf, |
| 27. Crucible, | Stirrers— |
| 178. Electric, | 141. Endless-chain, |
| 180. Forge— | 142. Reciprocating, |
| 181. Tuyeres, | 143. Rotary, |
| 84. Melting— | 144. Screw. |
| 89. Glass-pots, | 25. Roasting and smelting |
| 156. Glory-hole, | hearthis. |
| 119. Open-hearth, | 145. Slag— |
| 92. Pot-hearth, | 146. Disintegrating, |
| 93. Tank, | 91. Heaters, |
| 19. Pigment, | 147. Separators, centrifugal. |
| Reverheratory— | 18. Solution and precipita- |
| 121. Heating air, | tion— |
| 122. Necks and chimneys, | 86. Apparatus, |
| 123. Water-walls and roofs. | 67. Chlorination, |
| Hot-blast ovens— | 185. Cyanides, |
| 53. Double-surface, | 69. Ferrie salts, |
| 52. Single-surface. | 70. Parting bullion. |
| 124. Hot-blast valves. | 28. Spelter— |
| 14. Iron and steel direct— | 153. Processes, |
| 71. Apparatus, | 154. Retorts, |
| 73. Bricks, | 155. Stacks. |
| 74. Flux, | 27. Treating molten iron— |
| 75. Gases, | 44. Air, steam, and gases, |
| 72. Retorts and hearths, | 45. Alloys, |
| 76. Slag, | 46. Basic, |
| 77. Sponge. | 47. Basic linings, |
| 15. Lead. | 48. Granulating, |
| 127. Mechanical puddlers— | 48. Oxides, |
| 128. Rotary hearths, | 49. Physic, |
| 129. Tools. | 50. Scrap, |
| 130. Puddling-hearths— | 51. Vacuum. |
| 131. Chills and bottoms, | 55. Utilizing tin-scrap— |
| 132. Doors and bits. | 56. Wet processes. |

CLASS 207.—SHAPING FLUID METAL. (III.)

Sub-classes.

- | | |
|---------------------|-----------------------|
| 8. Granulating. | Shaping, by dies— |
| 1. Shaping. | 3. Tubes— |
| Shaping, by dies— | 4. Compound, |
| 2. Bars and plates, | 5. Curved, |
| 6. Covering wire, | 7. Shaping, by rolls. |

DIVISION IV.

EXAMINER POND.

CLASSES.—14, Bridges; 37, Excavating; 159, Fire Escapes and Ladders; 183, Fireproof Buildings; 61, Hydraulic Engineering; 189, Iron Structures; 72, Masonry; 104, Railways; 200, Towers.

CLASS 14.—BRIDGES. (IV.)

Sub-classes.

- | | |
|----------------|------------------|
| Bridges— | Bridges— |
| 7. Arch, | 8. Floating, |
| 12. Bowstring, | 5. Suspension, |
| 1. Draw— | 6. Truss. |
| 13. Basculo, | 2. Ferry-guards. |
| 9. Gates, | 11. Flooring. |
| 14. Lift, | 4. Piers. |
| 15. Swing, | |

CLASS 37.—EXCAVATING. (IV.)

Sub-classes.

- | | |
|-------------------------|---------------------------|
| 11. Diggers. | Excavators— |
| Dredgers— | 17. Wheel— |
| 18. Anchoring, | 28. And belt, |
| 14. Clamshell— | 29. And carrier. |
| 30. Buckets, | 39. Miscellaneous. |
| 13. Scouring— | 43. Road beds and grades. |
| 36. Hydraulic. | 40. Scoops— |
| Excavators— | 41. Railway-side. |
| 24. Chain and bucket— | 5. Scrapers— |
| 23. Buckets, | 19. Distant power, |
| 16. Dipper, | 22. Railway-side, |
| 9. Hydraulic, | 42. Sledged, |
| 46. Pipe-supports, | 7. Wheeled. |
| 44. Steam vacuum, | 6. Self-loading carts— |
| 45. Section-pipe mouth- | 32. Carrier, |
| pieces, | 33. Scoop, |
| 25. Plov and carrier, | 34. Wheel. |
| 10. Rammers, | 35. Snow-road machines. |
| 26. Screw— | 20. Treating quicksands. |
| 27. And carrier, | |

CLASS 159.—FIRE ESCAPES AND LADDERS. (IV.)

Sub-classes.

- | | |
|--------------------------|-------------------------|
| 10. Bed-bottom. | 8. Ladders— |
| 11. Blanket. | 49. Collapsible, |
| Checks— | Escape— |
| 22. Escapement, | 58. Balcony, |
| 33. Fluid, | 15. Fixed. |
| 24. Fly, | 16. Mounting. |
| 25. Governor. | 17. Sectional hand, |
| 1. Chutes. | 19. Shooting and truck, |
| 4. Friction— | 18. Trolley, |
| 25. Hand-clamp, | 50. Extension, |
| 26. Jaw, | 51. Feet, |
| 27. Jaw, sot-screw, | 3. Flexible— |
| 29. Reel— | 44. Reel, |
| 39. End-thrust, | 45. Sectional— |
| 32. Jaw-brake, | 46. Elevator, |
| 33. Jaw-brake, tension, | 47. Single-stile, |
| 31. Strap-brake, | 48. Trolley, |
| 34. Shooting lines, | 52. Hooks, |
| 35. Tortuons, | 57. Jacks, |
| 36. Tortuons and jaw— | 53. Sectional, |
| 37. Set-screw, | 7. Step— |
| 38. Wheel-brake. | 56. Store-service, |
| 5. Hoists— | 54. Stops, |
| 39. Fixed guides, | 55. Trussed. |
| 40. Movable guides, | 6. Lazy-tongs. |
| 41. Pulley-block, | 14. Sliding poles. |
| 42. Reciprocating cages, | Towers— |
| 43. Shooting-spar, | 13. Fixed, |
| 9. Trolley. | 12. Shooting. |

CLASS 183.—FIREPROOF BUILDINGS. (IV.)

Sub-classes.

- | | |
|-------------------------|-------------------------|
| Ceilings and floors— | 4. Fireproof roofs. |
| 10. Concrete, | 8. Fire-shields. |
| 11. Concrete and metal, | 5. Flooding. |
| 12. Metal, | 9. Shutters, fireproof. |
| 13. Protected wood, | Sidings and partitions— |
| 14. Tile, | 16. Concrete, |
| 15. Tile and metal. | 17. Tile. |
| 2. Columns and timber. | |

CLASS 61.—HYDRAULIC ENGINEERING. (IV.)

Sub-classes.

- | | |
|--------------------------------------|------------------------|
| 1. Aqueducts. | 32. Harbors. |
| 19. Breakwaters. | 29. Jetties. Sectional |
| 2. Cable-laying. | 11. Marine ways. |
| 3. Caissons— | 12. Mining. |
| 20. Ship. | 13. Pile-drivers— |
| 4. Canals— | 37. Jigs, |
| 28. Gate-valves, | 38. Monkey, |
| 27. Gates. Bear-trap— | 39. Piston, |
| 21. Lock. | 40. Swinging-hammer, |
| 5. Chutes— | 41. Sinking. |
| 33. Screens, | Piles— |
| 34. Water-power. | 42. Metallic, |
| 23. Cribbing. | 43. Protected. |
| 24. Dams and levees— | 30. Protecting shores. |
| 35. Cores, | 15. Tide-powers. |
| 36. Mattresses. | 16. Tunnels— |
| 22. Dams. Coffe— | 44. Excavators, |
| 25. Sectional. | 45. Shields. |
| 7. Diving-armor. | 17. Water-gates— |
| 8. Docks. | 46. Sliding. |
| 9. Drains. | 47. Swinging. |
| 26. Forming and preserving channels. | 31. Wharves. |

CLASS 189.—IRON STRUCTURES. (IV.)

Sub-classes.

- | | |
|--------------|----------------------|
| 1. Building. | 7. Lathing-wire. |
| 5. Doors. | 11. Metal sheathing. |
| 2. Grilles. | 9. Shutters. |
| 3. Jails. | 10. Windows. |
| 6. Lathing. | |

CLASS 72.—MASONRY. (IV.)

Sub-classes.

- | | |
|---------------------------------|------------------------------|
| 19. Apartment-houses. | 11. Coping. |
| 26. Ash-chutes. | 6. Facing walls. |
| 10. Bonding and tying. | 17. Foundations. |
| 13. Cellars. | 18. Hollow tile walls. |
| 2. Centering. | 19. Smoke and air flues. |
| 12. Cisterns. | 20. Stone and brick setting. |
| 4. Composite walls. | 21. Subways. |
| 25. Construction. Miscellaneous | 23. Tile and metal floors. |
| | 22. Timber-seats. |

DIVISION IV.—CONTINUED.

CLASS 104.—RAILWAYS. (IV.)

Sub-classes.

- | | |
|---------------------------|--------------------------|
| 114. Bridge-guards. | 22. Signals— |
| 49. Buffers. | 22. Switch, |
| 1. Car-replacers. | 70. Train-order. |
| 2. Chairs. | 94. Signals. Automatic— |
| 63. Compensators— | 122. Agitated, |
| 148. Intermittent-grip, | 123. Block, |
| 149. Slot, | 124. Crossing, |
| 150. Weight. | 72. Setting apparatus, |
| 40. Crossings— | 151. Stops, |
| 116. Movable-rail— | 73. Tappets, |
| 117. Stnb. | 74. Trips. |
| 3. Deadening noise. | 61. Sledways. |
| 75. Deflection-stands. | 95. Switch-chairs. |
| 76. Detector-bars. | 115. Switch-pieces. |
| 4. Elevated— | 96. Switch-rods. |
| 131. Bicycle, | 25. Switch-stands. |
| 146. Cable rail. | 12. Switches— |
| 50. Foot-guards. | 23. Automatic, |
| 5. Frogs— | 77. Automatic safety, |
| 99. Movable-rail— | 127. Derailing, |
| 112. Lap, | 125. Lap, |
| 119. Stub, | 26. Pneumatic, |
| 98. Spring-rail. | 78. Safety, |
| 35. Grippers— | 152. Ship, |
| 87. Automatic release, | 79. Spring, |
| 130. Coal-car, | 126. Stub, |
| 88. Friction, | 24. Tramway— |
| 89. Friction-belt, | 128. Car devices, |
| 132. Overstepping, | 129. Track devices. |
| 90. Roller, | Track— |
| 91. Sprocket-wheel, | 44. Fastenings, |
| 92. Whelp-wheel. | 14. Miscellaneous, |
| 109. Guard-rail clamps. | 45. Portable— |
| 7. Hose-bridges. | 112. Cross-overs. |
| 8. Inclined plane— | 46. Stringers and ties— |
| 113. Traction. | 55. Metallic. |
| 39. Interlocking— | Track-cleaners— |
| 105. Rods, | 65. Blade and broom, |
| 101. Selectors, | 36. Centrifugal, |
| 106. Stands— | 37. Dumpers, |
| 120. Catch, | 38. Elevators, |
| 121. Plunger. | 56. Explosive, |
| 133. Logging. | 100. Flangers— |
| 111. Pleasure-railways. | 101. Rotary, |
| 60. Pot-sleepers. | 102. Vibrating, |
| 134. Rack-rails. | 103. Hot plows, |
| 54. Rail-braces. | 153. Oilers and washers, |
| Rail-joints— | 51. Plows, |
| 135. Boxes, | 58. Removing weeds, |
| 136. Bridge-pieces. Base— | 66. Snow-guards, |
| 137. Tread, | 57. Stock-alarms, |
| 138. Joint-chairs, | 110. Track-curves. |
| 145. Miscellaneous, | 16. Track-layers. |
| 139. Scarf, | 17. Track-platforms. |
| 140. Splice-bars— | 59. Track-raisers. |
| 141. Girder, | 18. Traction— |
| 143. Threadless bolts, | 80. Cable-shields, |
| 142. Truss, | 81. Crossing conduits, |
| 144. Web-blocks. | 82. Crossing streams, |
| 10. Rails— | 83. Curves, |
| 147. Compound. | 53. Running and carrying |
| 21. Signals— | rope, |
| 42. Automatic alarm, | 84. Slot-closers, |
| 67. Bar, | 85. Slot-switches, |
| 71. Danger, | 86. Take-nps, |
| 31. Detonating, | 47. Underground. |
| 68. Light, | 48. Transfer-tables. |
| 27. Pneumatic— | 64. Truck-changers. |
| 104. Automatic, | 19. Turn-tables. |
| 69. Portable, | 62. Yards and plants. |

CLASS 200.—TOWERS. (IV.)

Sub-classes.

- | | |
|-------------------------|---------------------|
| 1. Girders and columns. | 2. Skeleton. |
| 4. Portable. | 3. Telegraph-poles. |

DIVISION V.

EXAMINER LANE.

CLASSES.—11, Book-Binding; 41, Fine Arts; 63, Jewelry; 84, Music; 120, Stationery.

CLASS 11.—BOOK-BINDING. (v.)

Sub-classes.

- | | |
|------------------------------------|---------------------------------|
| 1. Albums. | 7. Indexing— |
| 13. Bank-notes, checks, and bonds. | 21. Card catalogues. |
| 16. Binding. | 19. Leaves. |
| 2. Binding-machines. | 20. Leaves and covers. |
| 17. Books and binding. | 9. Newspaper-files. |
| 3. Books and covers. | 14. Postage and revenue stamps. |
| 4. Book-cover protectors. | 10. Temporary binders. |
| 5. Book-cutting. | 15. Tickets. |
| 12. Book-leafholders and marks. | 11. Writing-tablets— |
| 6. Book-stapling. | 22. Continuous, |
| 18. Covers. | 23. Manifoldng. |

CLASS 41.—FINE ARTS. (v.)

Sub classes.

- | | |
|-------------------------|--------------------------|
| 2. Artificial flowers. | 10. Gilding. Leaf- |
| 1. Artists' appliances. | 12. Medals. |
| 19. Badges. | 21. Metal ornamentation. |
| 3. Banners and flags. | 13. Ornamenting cloth. |
| 4. Canvas-stretchers. | 15. Pictures. |
| 5. Decorative painting. | 14. Picture-frames. |
| 6. Drawing-boards. | 20. Picture-supports. |
| 7. Easels. | 16. Sculpture. |
| 9. Engraving and tools. | 17. Theater appliances. |
| 8. Engraving-machines. | 18. Transfers. |

CLASS 63.—JEWELRY. (v.)

Sub-classes.

- | | |
|------------------|---|
| 1. Bracelets. | 11. Metal stock and ornamental wire fabric. |
| 2. Brooches. | 7. Ornamental chains. |
| 4. Ear-rings. | 10. Processes. |
| 5. Finger-rings. | 9. Watch-chain attachments. |
| 8. Gem-setting. | |
| 6. Lockets. | |

CLASS 84.—MUSIC. (v.)

Sub-classes.

- | | |
|--|-------------------------------|
| 1. Accordions. | 24. Pedals— |
| 82. Autoharps. | 97. Auxiliary, |
| 53. Auxiliary strings. | 98. Gnards, |
| 2. Banjos and guitars. | 99. Locks. |
| 6. Castanets. | 61. Pianissimo devices. |
| 85. Charts— | Piano— |
| 86. Harmony and transposition. | 26. Actions— |
| 7. Clarinets and flutes. | 100. Dampers, |
| 55. Combined organ and piano. | 101. Flanges, |
| 8. Cornets and trumpets. | 102. Frames, |
| 9. Couplers. | 103. Hammers, |
| 10. Drums. | 60. Pedal, |
| 81. Electric actions. | 104. Plectrum. |
| 11. Exercising devices— | 66. Agraffes and bridges— |
| 91. Hand attachments, | 27. Attachments, |
| 92. Keyboard, | 52. Cases, |
| 93. Keyboard attachments, | 28. Frames, |
| 94. Vocal. | 29. Legs, |
| 87. Finger-boards. | 30. Sounding-boards, |
| 13. Harmonicas— | 40. Stringing, |
| 88. Supports. | 67. Tuning-pins— |
| 12. Harmonic attachments— | 105. Coupling-clamp, |
| 56. Dampers— | 106. Direct-pull, |
| 83. Violin. | 107. Lever, |
| 14. Harps. | 108. Presser-deflectors, |
| 48. Indicators. | 109. Push-rod and carrier, |
| 15. Insulators. | 110. Worm-gear. |
| 57. Keyboard self-playing attachments. | 25. Pianos— |
| 58. Key-holding devices. | 70. Sostenuto, |
| 16. Keys and keyboards— | 46. Violin, |
| 96. Touch-regulators. | 31. Without strings. |
| 49. Knee-swells. | 68. Recording attachments. |
| 17. Leaf-turners. | 33. Reeds. |
| 79. Mouthpieces. | 34. Reed-boards, |
| 89. Musical blocks. | 37. Self-playing instruments— |
| 18. Notation. | 71. Cylinder, |
| Organ— | 113. Electropneumatic, |
| 19. Actions— | 84. Note-sheets, |
| 95. Electropneumatic, | 51. Pneumatic, |
| 20. Pnenmatic, | 114. Spurs and picks. |
| 50. Bellows, | 69. Solo attachments. |
| 21. Cases, | 41. Transposers. |
| 22. Pipes, | 42. Tremolos. |
| 59. Stop-actions— | 43. Tuning-instruments. |
| 54. Combination, | Violin— |
| 23. Swells, | 72. Bows, |
| 47. Wind-chests. | 73. Bridges, |
| Organs— | 74. Chin-rests, |
| 90. Pedal bass, | 75. Dampers and mutes, |
| 32. Pipe, | 77. Tail-pieces, |
| 35. Reed— | 78. Tuning-pegs. |
| 36. Attachments for, | 44. Violins— |
| 111. Folding, | 76. Practice, |
| 112. With pipes. | 115. Supports. |
| 38. Steam. | 80. Zithere— |
| | 116. Keyed, |
| | 117. Picks. |

CLASS 120.—STATIONERY. (v.)

Sub-classes.

- | | |
|----------------------------------|-----------------------------------|
| 4. Bill-files— | 13. Inkstands. |
| 40. Boxes— | 37. Knife-erasers. |
| 41. Separators, | 38. Lead and crayon holders. |
| 42. Continuous-web, | 36. Paper-clips. |
| 43. Division leaves and pockets, | 17. Paper-weights. |
| 44. Followers, | 18. Pens. |
| 45. Impaling-pins, | 19. Penholders. |
| 46. Packet-holders, | 20. Pen and pencil cases. |
| 47. Pins and followers. | 21. Pen racks and cleaners. |
| 5. Blotters. | 22. Pencils. |
| 6. Calendars— | 23. Pencil-clasps. |
| 48. Continuous-web, | 25. Pencil-sharpener. |
| 49. Disk, | 26. Post-office boxes. |
| 50. Roller. | 28. Scholars' companions. |
| 7. Copy-holders. | 29. Slate and blackboard rubbers. |
| 39. Desk-rulers. | 30. Sponge-cups. |
| 9. Erasers. | 35. Stylographic pens. |
| 11. Fountain-pens. | 32. Ticket-cases. |
| 12. Hand-rests. | |

DIVISION VI.

EXAMINER LITTLEWOOD.

CLASSES.—8, Bleaching and Dyeing; 23, Chemicals; 52, Explosives; 71, Fertilizers; 167, Medicines; 95, Photography; 99, Preserving; 127, Sugar and Salt; 128, Surgery.

CLASS 8.—BLEACHING AND DYEING. (VI.)

Sub-classes.

- | | |
|--------------------------------|--------------------------------------|
| 16. Apron vats and stretchers. | 19. Open vats. |
| 2. Bleaching. | 17. Perforated rolls and spray-jets. |
| 1. Carbon dyes. | 7. Press-dyeing. |
| 18. Close vats. | 8. Renovating dress. |
| 5. Dyeing processes. | 15. Steam and bleach chests. |
| 6. Dyes. | 12. Wool-cleaning. |
| 13. Mordants. | |

CLASS 23.—CHEMICALS. (VI.)

Sub-classes.

- | | |
|----------------------------------|--|
| 1. Acids. Mineral | 10. Metalloids. Embraces non-illuminating gases, sulfur, and phosphorus. |
| 21. Ammonia. | 11. Packing chemicals. |
| 3. Apparatus. | 26. Purifying water. |
| 24. Carbon compounds, not dyes. | 13. Salines. |
| 5. Fire-extinguishing compounds. | 22. Soda and potash. |

CLASS 52.—EXPLOSIVES. (VI.)

Sub-classes.

- | | |
|---------------------|---------------------------|
| 1. Blasting-powder. | 5. Matches. |
| 2. Fulminates. | 3. Nitro compounds. |
| 4. Gunpowder. | 6. Pyrotechnic compounds. |

CLASS 71.—FERTILIZERS. (VI.)

Sub-classes.

- | | |
|------------------|---------------------------|
| 1. Apparatus. | 7. Phosphates. |
| 9. Compositions. | 8. Sewage and night-soil. |
| 6. Organic. | |

CLASS 167.—MEDICINES. (VI.)

Sub-classes.

- | | |
|--------------------------|--------------------------|
| 2. Capsules. | 7. Internal remedies. |
| 3. Disinfectants. | 8. Plasters. |
| 4. Extracts. | 11. Tobacco substitutes. |
| 5. Hair dyes and tonics. | 9. Topical remedies. |
| 6. Insecticides. | 10. Veterinary. |

CLASS 95.—PHOTOGRAPHY. (VI.)

Sub-classes.

- | | |
|--------------------------|------------------------------|
| 31. Actinometers. | 22. Pictures. |
| 2. Baths. | 36. Plate-holders— |
| 4. Burnishing. | 43. Magazine. |
| 5. Cameras— | 25. Printing and vignetting. |
| 39. Magazine. | 29. Processes. |
| 40. Panoramic. | 26. Retouching. |
| 7. Camera-stands. | 38. Roll-holders. |
| 8. Coloring. | 44. Shutters— |
| 9. Daguerreotypy. | 45. Curtain. |
| 10. Dark-rooms. | 46. Diaphragm. |
| 12. Embossing. | 47. Pivoted. |
| 41. Finders. | 48. Sliding. |
| 42. Focusing devices. | 49. Studios— |
| 116. Heaters and driers. | 50. Accessories. |
| 17. Mechanical printing. | 35. Surfaces— |
| 18. Mounting. | 51. Sensitive. |
| 32. Photosculpture. | 52. Trays and tanks. |

CLASS 99.—PRESERVING. (VI.)

Sub-classes.

- | | |
|-----------------|----------------------|
| 1. Antiseptics. | 8. Exclusion of air. |
| 2. Apparatus. | 11. Food compounds. |
| 4. Cold. | 9. Fumigation. |
| 5. Desiccation. | 10. Panification. |
| 6. Egg-testers. | 12. Wood saturation. |

CLASS 127.—SUGAR AND SALT. (VI.)

Sub-classes.

- | | |
|--------------------------|----------------------------|
| 1. Bleaching cane-juice. | 10. Glucose. |
| 2. Bone-black. | 19. Graining and draining. |
| 3. Centrifugal machines— | 11. Mixers. |
| 21. Honey-extractors. | 12. Molds and carriages. |
| 20. Liquid-separators. | 14. Refining salt. |
| 22. Testers. | 15. Refining sugar. |
| 4. Confectionery. | 16. Salt-making. |
| 6. Cube sugar. | 23. Starch. |
| 7. Defecating. | 17. Sugar-making. |
| 8. Diffusion apparatus. | 18. Vacuum-pans. |
| 9. Evaporating-pans. | |

CLASS 128.—SURGERY. (VI.)

Sub-classes.

- | | |
|-------------------------------|--------------------------------|
| 2. Atomizers. | 16. Movement cure. |
| 33. Baby jumpers— | 17. Nasal douches. |
| 34. Walkers. | 44. Needle holders and cases. |
| 3. Bandages— | 18. Nipples. |
| 37. Bandage-machines. | 19. Nursing-bottles. |
| 38. Snpensory. | 20. Obstetrics. |
| 39. Water. | 21. Pessaries. |
| 4. Breast-pumps. | 22. Pharmaceutical. |
| 32. Capsule-machines. | 23. Scarificators and lancets. |
| 5. Catamenial sacks. | 24. Speculums. |
| 40. Chest-protectors. | 25. Syringes— |
| 9. Depurators. | 45. Expanding arm. |
| 35. Dumb-bells and clubs. | 46. Pile. |
| 10. Ear. | 47. Water-bag. |
| 36. Exercising-machines. | 49. Thermocauters. |
| 11. Eye. | 26. Trusses. |
| 13. Inhalers and respirators— | 51. Urinary apparatus. |
| 42. Mask. | 27. Veterinary— |
| 43. Laryngoscopes. | 52. Horse-shields. |
| 28. Miscellaneous. | |

DIVISION VII.

EXAMINER SKINNER.

CLASSES.—46, Games and Toys; 56, Harvesters; 208, Velocipedes.

CLASS 46.—GAMES AND TOYS. (VII.)

Sub-classes.

- | | |
|----------------------------|--------------------------|
| 4. Balls and bats. | 27. Roundabouts. |
| 43. Base-ball. | 53. Skaters' appliances. |
| 6. Billiard appliances— | 50. Skates— |
| 7. Balls, | 51. Roller. |
| 8. Chalk-cups, | 52. Skate-wheels. |
| 9. Cues, | 30. Skipping-ropes. |
| 10. Cue-tip fasteners, | 31. Soap-bubble pipes. |
| 11. Cushions, | 32. Spinning-tops. |
| 12. Tables, | 33. Stilts. |
| 13. Table-levelers. | 35. Toy building-blocks. |
| 14. Buzzes and whirligigs. | 36. Toy money-boxes. |
| 15. Croquet. | 37. Toys— |
| 16. Dice-boxes. | 49. Electric, |
| 20. Game apparatus. | 40. Figure— |
| 21. Game-boards. | 45. Wheeled, |
| 22. Hobby-horses. | 46. Sounding— |
| 23. Kites. | 47. Wheeled, |
| 42. Lawn-tennis. | 48. Wheeled. |
| 25. Playing-cards. | 38. Trundles and hoops. |
| 41. Puzzles and magic. | |

CLASS 56.—HARVESTERS. (VII.)

Sub-classes.

- | | |
|-------------------------------|----------------------------------|
| 1. Bean-harvesters. | Horse-rakes— |
| Binders— | 66. Drags, |
| 35. Compressers, | 67. Hand-dumpers, |
| 36. Grain-adjusters, | 68. Hay-cockers, |
| 37. Sheaf-carriers. | 69. Rake-teeth. |
| 2. Clover-harvesters. | 115. Side-delivery. |
| 3. Combined rakes and ted- | 19. Lawn-mowers— |
| ders. | 114. Grass-catchers. |
| Corn-harvesters— | 20. Manure-forks. |
| 40. Implements. | 33. Miscellaneous. |
| 103. Stalk-cutters— | Mowers— |
| 104. Droppers, Crane | 70. Anomalous, |
| 105. Direct-tilting, | 72. Center-cut, |
| 106. Ejector, | 73. Front-cut, One-wheel |
| 107. Endless-apron, | 74. Two-wheels, |
| 108. Horizontally moving | 76. Rear-cut, One-wheel |
| and tilting, | 77. Two-wheels, |
| 109. Sliding-bottom, | 75. Reciprocating-gear, |
| 110. Strippers, | 78. Thrust-cut. |
| 111. Strippers, Comb | 32. Platform adjustments. |
| 112. Knife, | 22. Reels. |
| 113. Roller. | Revolving horse-rakes— |
| 5. Corn-shockers. | 80. Flop-over, |
| 6. Cotton-harvesters. | 81. Wheel. |
| Cutting apparatus— | 27. Scythes and cradles. |
| 42. Endless, | 24. Seats. |
| 43. Guard-fingers and finger- | Self-binders— |
| bars, | 82. Clips and prepared |
| 44. Reciprocating, | bands, |
| 45. Rotary, | 83. Cord-knotters, |
| 46. Vibrating. | 84. General structure, |
| Droppers— | 85. Gleaners and binders, |
| 47. Direct-tilting, | 86. Tension and take-up de- |
| 49. Miscellaneous, | vices, |
| 48. Opening and closing, | 87. Twisters and tuckers, |
| 50. Side-delivery, | 88. Wire-twisters. |
| 51. Swinging and tilting. | Self-rakers— |
| 99. Fruit-gatherers. | 89. Endless carriers, |
| 9. Gearing. | 90. Gaveling-tongs, |
| 31. Grain wheels and casters. | 91. Platform-movement, |
| Hand-binders— | 92. Reciprocating, horizontal |
| 52. Attachments, | curvilinear, |
| 53. Elevated delivery, Rear | 93. Reciprocating, horizontal |
| 54. Elevated delivery, Side | rectilinear, |
| 55. Flat delivery, | 96. Rotary, horizontal axis, |
| 56. Manual traction. | 94. Rotary, vertical axis, |
| 12. Hand-rakes. | switch, |
| Hay-loaders— | 95. Rotary, vertical axis, no |
| 61. Endless-belts, | switch, |
| 62. Intermittent, | 98. Traveling, horizontal ir- |
| 63. Lifting-reels, | regular path, |
| 64. Walking-rakes. | 97. Traveling, vertical irreg- |
| 100. Headers. | ular path. |
| 16. Hedge-trimmers. | 102. Sheek-compressors. |
| 17. Hemp and flax harvesters. | 28. Tedders. |
| Horse-rakes— | 29. Thrashers. |
| 65. Draft-dumpers, | 30. Track clearers and dividers. |

CLASS 208.—VELOCIPEDES. (VII.)

Sub-classes.

- | | |
|-------------------------------|--------------------------------|
| 11. Bearings. | 14. Locks. |
| Bicycles— | 25. Luggage-carriers. |
| 5. Header-preventers, | 10. Pedals and cranks. |
| 4. Ordinary, Rigid-frame | Polycycles— |
| 6. Safety, Rigid-frame | 42. Figure, |
| 7. Spring-frame, | 43. Spring-frame, |
| 23. Supports, | 44. Steering devices. |
| 8. Tandem. | Polycycles, Propulsion— |
| Bicycles, Propulsion— | 40. Axle-couplings, |
| 16. Crank and gear, | 32. Crank and chain, |
| 17. Crank and chain, | 31. Crank and gear, |
| 18. Lever and crank, | 30. Crank and pitman, |
| 19. Lever, crank, and gear or | 33. Lever and crank, |
| chain, | 34. Lever, crank, and gear or |
| 20. Lever and ratchet, | chain, |
| 21. Lever, ratchet, and gear | 35. Lever and ratchet, |
| or chain. | 36. Lever, ratchet, and gear |
| 23. Miscellaneous, | or chain, |
| 22. Rack-and-pinion. | 38. Miscellaneous, |
| 13. Brakes. | 37. Rack-and-pinion, |
| 24. Children's seats. | 41. Rowing-machines. |
| 27. Coupling-bars. | 15. Saddles. |
| 9. Crank-clutches. | 12. Steering-heads and handle- |
| 3. Dicycles. | bars, |
| 29. Dress and mind-guards. | 26. Steps and foot-rests. |
| 2. Epicycles. | 1. Unicycles. |

DIVISION VIII.

ACTING EXAMINER McROBERTS.

CLASSES.—5, Beds; 155, Chairs; 156, Curtains, Shades, and Screens; 45, Furniture; 65, Kitchen and Table Articles; 211, Store Furniture.

CLASS 5.—BEDS. (VIII.)

Sub-classes.

- | | |
|----------------------------|---------------------------------|
| eds— | Bedsteads— |
| Air, | Sofa— |
| Camp. | 51. Vertically-moving |
| d-bottoms— | frame, |
| Fabrics, | 17. Table, |
| 50. Fabric and springs, | 18. Wardrobe-bedsteads— |
| 5. Slats, | 52. Center-folding, |
| 1. Slats and springs, | 53. End-folding, |
| 2. Springs. | 34. Extension, |
| 3. Bed-clothing. | 54. Shifting-fulcrum, |
| 4. Bedsteads— | 37. Single-frame, |
| 41. Attachments, | 38. Sliding-frame. |
| 42. Braces, | 22. Clothes-clamps. |
| 8. Extension, | 55. Corner-fastenings. |
| 9. Folding, | 56. Cradles— |
| 12. Invalid— | 57. Motor-operated. |
| 43. Head-sections, | 58. Cribs— |
| 44. Lifters and conveyers, | 59. Attachments. |
| 45. Vertically-moving | 10. Hammocks— |
| frame, | 30. Hooks, |
| 16. Sofa— | 31. Stretchers, |
| 46. Extension, | 32. Supports, |
| 47. Folding-back, | 13. Mattresses. |
| 48. Folding back and seat, | 14. Mosquito-nets and canopies. |
| 49. Folding-seat, | 15. Pillows. |
| 50. Rotary back and seat, | 33. Pillow-sham holders. |
| | 21. Springs. |

CLASS 155.—CHAIRS. (VIII.)

Sub-classes.

- | | |
|-------------------------------|-----------------------------|
| 3. Chaire— | 33. Pads and feet. |
| 26. Attachments, | Rests— |
| 27. Adjustable backs, | 9. Foot, |
| 28. Adjustable backs and | 10. Head. |
| seats, | 34. School seats and desks. |
| 29. Backs and seats independ- | Seats— |
| ently adjustable, | 2. Car, |
| 4. Bottoms, | 5. Circus, |
| 6. Convertible, | 37. Reversible, |
| 7. Dentists', | 25. Spring. |
| 8. Folding— | 19. Settees. |
| 30. Adjustable, | 20. Sofas. |
| 11. Invalid, | 22. Stools and seats— |
| 12. Nursery, | 38. Duplex, |
| 13. Opera, | 39. Pawl and ratchet, |
| 16. Reclining, | 40. Pedestal, |
| 18. Rocking— | 41. Screw. |
| 31. Platform, | Stools— |
| 21. Step-ladder, | 42. Cane, |
| 23. Surgical, | 43. Folding. |
| 36. Swinging, | 35. Swings. |
| 24. Tilting. | 43. Upholstery. |

CLASS 156.—CURTAINS, SHADES, AND SCREENS. (VIII.)

Sub-classes.

- | | |
|--------------------------------|-----------------------|
| 15. Awnings. | Shade— |
| 2. Curtain-cord holders. | 28. Raisers. |
| 32. Curtain-cord tighteners. | 29. Rollers— |
| Curtain— | 30. Dropping, |
| 33. Holders, | 34. Friction-brake, |
| 19. Poles, | 35. Ratchet-and-pawl, |
| 20. Poles and rings, | 36. Spring, |
| 22. Pole-supports, | 31. Sticks. |
| 21. Rings and pins. | 17. Venetian blinds. |
| 16. Flexible blinds. | 13. Window cornices— |
| 23. Shade and curtain hangers. | 14. Screens— |
| Shade— | 37. Exits, |
| 24. Brackets, | 38. Extensible, |
| 25. Fastenings, | 39. Rolling, |
| 26. Guides, | 10. Shades. |
| 27. Hangers, vertically-ad- | |
| justable, | |

CLASS 45.—FURNITURE. (VIII.)

Sub-classes.

- | | |
|-----------------------------|-------------------------|
| 1. Book-cases— | Book and music holders— |
| 53. Adjustable shelf-parti- | 57. Base-supported— |
| tions, | 80. Adjustable, |
| 54. Adjustable shelves and | 81. Rotary, |
| shelf-supports, | 59. Body-supported, |
| 55. Hanging shelves, | 60. Book-stands— |
| 78. Knockdown, | 85. Folding, |
| 79. Revolving, | 86. Leveling, |
| 56. Roller-shelves. | 58. Bracket-supported— |

CLASS 45.—Continued.

- | | |
|---------------------------------|------------------------------|
| Book and music holders— | 72. Portable nursery-fences. |
| Bracket-supported— | 71. Provision-safes— |
| 82. Adjustable, | 102. Knockdown, |
| 61. Leaf-holders, | 103. Revolving, |
| 83. Leaf-rests, | 104. Window. |
| 62. Music-stands— | 24. Quilting-frames. |
| 121. Portable, | 105. Screens— |
| 63. Panel, | 106. Folding. |
| 64. Portfolio. | 28. Soap-holders. |
| Brackets— | 41. Spittoons— |
| 65. Arm-supporting— | 107. Covered, |
| 84. Adjustable, | 108. Flushing. |
| 66. End-supporting— | 31. Tables— |
| 67. Adjustable. | 109. Adjustable angularly, |
| 5. Bureaus— | 110. Angularly and verti- |
| 88. Knockdown. | cally, |
| 89. Carpet-stretchers. | 74. Folding, |
| 43. Carpet stretchers and tack- | 111. Vertically, |
| ers. | 75. Attachments, |
| 68. Covers. | 9. Extension— |
| 6. Desks— | 112. Center, |
| 90. Attachments, | 113. End, |
| 91. Lids— | 114. Flexible top, |
| 92. Flexible, | 115. Slides, |
| 69. Portable, | 11. Folding— |
| 93. Sectional, | 116. Sectional top, |
| 70. Table. | 17. Kitchen, |
| 7. Drawers— | 46. Lap, |
| 77. Guides, | 47. Leaf-supports, |
| 94. Locking devices, | 48. Leg fastening and brac- |
| 95. Swinging, | ing, |
| 96. Tilting. | 117. Pedestals, |
| 13. Hat and coat racks. | 26. Self-waiting, |
| 15. Insect-guards. | 27. Sewing-machine— |
| 16. Kitchen-cabinets. | 120. Covers, |
| 18. Mirrors— | 50. Surgical, |
| 97. Bracket, | 51. Wall. |
| Mirrors— | 32. Towel racks and stands. |
| 98. Hand, | 52. Type-writer cabinets. |
| 99. Multiple, | 33. Umbrella-stands. |
| 100. Stand, | 36. Wall-protectors. |
| 39. Window. | 37. Wardrobes— |
| 22. Packing furniture. | 118. Knockdown. |
| 23. Picture-hangers— | 38. Washstands— |
| 101. Adjustable. | 119. Reservoir. |

CLASS 65.—KITCHEN AND TABLE ARTICLES. (VIII.)

Sub-classes.

- | | |
|------------------------|-------------------------|
| 3. Cake-turners. | 25. Fruit-lifters. |
| 5. Casters— | 26. Jar-lifters. |
| 55. Rotary. | 28. Ladles. |
| 10. Compound tools— | 29. Napkin-holders. |
| 56. Gripping. | 30. Oyster-openers. |
| 45. Condiment-holders— | 31. Pitchers— |
| 57. Pulverizing. | 64. Tilting frame. |
| 12. Culinary. | 32. Plate-lifters. |
| 13. Cups— | 65. Racks and rests. |
| 58. Collapsible. | 36. Scoops. |
| 15. Dishes and plates— | 46. Stopper-extractors— |
| 59. Covered, | 47. Hook. |
| 60. Pivoted covers. | 48. Screw— |
| 16. Dish covers— | 49. Lever-operated, |
| 61. Stands. | 50. Rotary, |
| 20. Dust-pans— | 51. Screw and lever. |
| 62. Brush attachments, | 52. Table-tongs. |
| 63. Foot pieces. | 53. Trays— |
| 22. Egg-cups. | 54. Attaching devices. |

CLASS 211.—STORE FURNITURE. (VIII.)

Sub-classes.

- | | |
|---------------------------|---------------------|
| 1. Bag and twine holders— | Display-racks— |
| 2. Bag-holders, | 15. Adjustable-arm, |
| 3. Twine-holders— | 16. Enclosed, |
| 4. Take-up— | 17. Hanging, |
| 5. Rotary. | 18. Roll, |
| 6. Bins. | 19. Rope, |
| 7. Cabinet— | 20. Rotary— |
| 8. Delivering, | 21. Enclosed, |
| 9. Grocers', | 22. Sample sheet— |
| 10. Spool. | 23. Rotary. |
| 11. Counters— | 24. Display-stands. |
| 12. Attachments. | 25. Show-cases— |
| 13. Display-forms. | 26. Lid-lifters. |
| 14. Display-racks. | 27. Shelving. |

DIVISION IX.

EXAMINER TRYON.

CLASSES.—4, Baths and Closets; 169, Fire-Extinguishers; 138, Hydraulic Motors; 103, Pumps; 182, Sewerage; 137, Water-Distribution.

CLASS 4.—BATHS AND CLOSETS. (IX.)

Sub-classes.

- | | |
|-----------------------|---------------------------------|
| 1. Basins and stands. | Water-closets— |
| 2. Bathing apparatus. | 22. Siphon. |
| 19. Bed-pans. | 17. Valved. |
| 5. Closet-cisterns. | 23. Washout. |
| 20. Dry closets. | 18. Water-closet attachments. |
| 11. Sinks and traps. | 15. Water-closet valves. |
| 12. Urinals. | 21. Water-closet and sewer ven- |
| 13. Vapor-baths. | tilation. |
| Water-closets— | |
| 16. Plunger, | |

CLASS 169.—FIRE-EXTINGUISHERS. (IX.)

Sub-classes.

- | | |
|----------------|----------------|
| 4. Car-heater. | 2. Portable. |
| 1. Chemical. | 3. Stationary. |

CLASS 138.—HYDRAULIC MOTORS. (IX.)

Sub-classes.

- | | |
|-------------------|--------------------------------|
| 11. Chain. | Turbines— |
| 8. For elevators. | 4. Bottom-supply. |
| 9. For jacks. | 5. Side-ring supply. |
| 10. For presses. | 6. Top and side direct-supply. |
| 1. Oscillating. | 7. Top-ring supply. |
| 2. Reciprocating. | |
| 3. Rotary— | |
| 12. Feathering. | |

CLASS 103.—PUMPS. (IX.)

Sub-classes.

- | | |
|--------------------------------|-------------------------------|
| 45. Accumulators. | 17. Hollow piston-rod. |
| 2. Attachments. | 22. Lift. |
| 46. Brakes. | 47. Lift and force. |
| 5. Cattle. | 48. Miscellaneous parts. |
| 6. Chain. | 23. Oil. |
| 50. Collapsible tube. | 25. Oscillating. |
| 7. Compound. | 27. Pistons. |
| 8. Compressed-air water-eleva- | 51. Railway-tank feeders. |
| tors. | 29. Rams. |
| 10. Diaphragm. | 44. Rotary double-piston. |
| 11. Double-acting. | 43. Rotary single-piston. |
| 12. Double-cylinder. | 31. Sand. |
| 13. Double-piston. | 32. Ship. |
| 14. Drainage. | 49. Valves. |
| 16. Force. | 35. Windlass water-elevators. |

CLASS 182.—SEWERAGE. (IX.)

Sub-classes.

- | | |
|--------------------------------|-------------------------------|
| 1. Backwater and animal gates. | 5. Manholes and catch-basins. |
| 2. Cleaning. | 6. Mechanical treatment. |
| 3. Construction. | 7. Systems. |
| 4. Flushing. | |
| 8. Flush-tank siphons. | |

CLASS 137.—WATER-DISTRIBUTION. (IX.)

Sub-classes.

- | | |
|--------------------------|--------------------------------|
| 1. Aquariums. | Filters— |
| 32. Check-valves. | 42. Rotary-bed, |
| Cocks and faucets— | 52. Service-pipe, |
| 26. Compound, | 51. Strainers, |
| 4. Reciprocating valves, | 44. Submerged, |
| 5. Sliding gates, | 43. Systems. |
| 27. Tank, | 11. Fountains. |
| 35. Thermal, | 12. Funnels. |
| 6. Tube-compressors, | 33. Hose-patches. |
| 7. Turning plugs. | 13. Hydrants and plugs. |
| 9. Cut-offs and spouts. | 14. Irrigating and sprinkling. |
| Filters— | 16. Mains and pipes. |
| 36. Beer, | 17. Nozzles. |
| 37. Cistern-cleaners, | Pipe-couplings— |
| 45. Cistern-supply, | 28. Detachable, |
| 46. Decanters, | 34. Detachable and flexible, |
| 38. Faucet, | 29. Permanent, |
| 47. Filtering-faucets, | 30. Valved. |
| 39. Granular-bed, | 53. Safety-valves. |
| 48. Materials, | 18. Sampling-tubes. |
| 40. Oil, | 20. Siphons. |
| 49. Porous-wall, | 21. Tanks. |
| 41. Portable, | 54. Valves for inflation. |
| 50. Pressure, | 31. Water-supply hose-holders. |

DIVISION X.

EXAMINER SANDERS.

CLASS.—21, Carriages and Wagons.

CLASS 21.—CARRIAGES AND WAGONS. (X.)

Sub-classes.

- | | |
|---------------------------------|-----------------------------|
| 80. Ambulances and stretch-ers. | 47. Sled-propellers. |
| 2. Axle-boxes. | 48. Sleds— |
| 4. Axle-skins. | 94. Hand, |
| 5. Axles. | 95. Shifting-thills, |
| 7. Bodies. | 96. Wheel-runners. |
| 81. Boots and aprons. | 49. Spoke-sockets. |
| 10. Brake-levers. | 97. Spring-gear— |
| 8. Brakes— | 98. Side-bar cross, |
| 9. Automatic, | 99. Axle cross, |
| 82. Shoes. | 100. Longitudinal, |
| 11. Carriage-irons. | 101. Lever. |
| 85. Chafe-irons. | 50. Springs— |
| 12. Children's carriages— | 102. Bolster, |
| 83. Folding, | 105. Braces and equalizers, |
| 84. Stops. | 103. Elliptic, |
| 86. Chute-wagons. | 51. Platform, |
| 13. Clips. | 104. Shackles |
| 14. Close carriages. | 53. Torsion. |
| 15. Dash-boards. | 54. Standards. |
| 125. Doors and windows. | 55. Steps. |
| 76. Draft-equalizers. | 56. Sulkies. |
| 19. Drays. | 57. Thill-couplings— |
| 20. Dumping-wagons. | 106. Antirattlers, |
| 21. End-gates. | 107. Jacks. |
| 87. Fellies and rims. | 108. Thill-supports. |
| 23. Fenders. | Tires— |
| 24. Fifth-wheels. | 109. Cushion, |
| 88. Hand-barrows. | 112. Inflating. |
| 74. Hay-racks. | 110. Metallic. |
| 26. Hearses. | 111. Pneumatic, |
| 27. Holdbacks. | 113. Repairing. |
| 75. Horse-detachers. | 59. Tire-tighteners. |
| 28. Horse-carriages. | 63. Tongue-supports. |
| 29. Hounds. | 60. Top-joints. |
| 30. Hub-attaching devices. | 61. Top-props. |
| 89. Hub-caps. | 62. Tops. |
| 31. Hubs. | 114. Traction-engines— |
| 32. King-bolts. | 124. Steppers. |
| 33. Lumber-wagons. | 64. Traction-wheels. |
| 90. Motor-vehicles. | 65. Trucks— |
| 77. Neck-yokes. | 121. Barrel, |
| 36. Poles and shafts— | 116. Brick, |
| 91. Convertible. | 122. Drying, |
| 92. Pole-tips. | 118. Elevating, |
| 39. Running-gear. | 115. House-moving, |
| 40. Sand-bands. | 120. Implement, |
| 41. Seat-locks. | 117. Piano, |
| 42. Seats— | 119. Water-barrel. |
| 43. Shifting, | 68. Wheelbarrows. |
| 44. Spring. | 69. Wheels— |
| 45. Shifting-rails. | 123. Spring. |
| 93. Short-turning gear. | 79. Whimetre-hooks. |
| 46. Sled-brakes. | 78. Whimetre-trees. |

DIVISION XI.

EXAMINER HARMON.

CLASSES.—12, Boots and Shoes; 24, Clasps, Buckles, and Buttons; 54, Harness; 60, Hose and Belting; 69, Leather-Working Machinery.

CLASS 12.—BOOTS AND SHOES. (XI.)

Sub-classes.

- | | |
|--------------------------------|--------------------------------|
| 2. Boot-jacks. | 11. Pegs. |
| 30. Boot-treeing machinee. | 12. Pegging-jacks. |
| 3. Boot-trees. | 13. Pegging-machines. Nails |
| 4. Burnishing. | and pegs— |
| 24. Channeling-machines. | 35. Wire. |
| 5. Crimping. | 14. Rubber. |
| 6. Edge-planes and shaves. | 15. Shankie and machinee. |
| 32. Hand nailing implements. | 16. Shoe-fastenings. |
| 34. Heel-machines. | 17. Soles. |
| 33. Heel-nailing machines. | 18. Sole and heel trimming ma- |
| 29. Heel-stiffener machines. | chinee. |
| 7. Heels. | 19. Sole-machines. |
| 8. Ice-creeper. | 26. Sole and heel plates. |
| 9. Lasts. | 20. Tips and stiffeners. |
| 10. Lasting-machines. | 21. Tools. |
| 25. Lasting and lasting tools. | 22. Uppers. |
| 31. Peg-floats. | 23. Upper-machines. |

CLASS 24.—CLASPS, BUCKLES, AND BUTTONS. (XI.)

Sub-classes.

- | | |
|-----------------------------|-----------------------------|
| 26. Baggage-checks. | 8. Eyeletting-machines. |
| 23. Buckles and enap-hooks | 25. Garment-supporters. |
| combined. | 30. Glove-fastenings. |
| 1. Buckles— | 9. Hooks. |
| 27. Personal wear. | 10. Hooks and eyes. |
| 2. Buttons— | 33. Napkin-supporters. |
| 23. Hinged shoe, | 11. Necktie-fasteners. |
| 21. Separable. | 13. Paper-fasteners. |
| 3. Buttoners. | 14. Punches. |
| 4. Button-fasteners. | 32. Ribbon-clasps. |
| 5. Button-setting machines. | 15. Rings. |
| 29. Button-setting tools. | 16. Safety attachments. |
| 6. Clasps. | 17. Snap-hooks. |
| 31. Corset-fastenings. | 20. Suspensers. |
| 24. Cuff-holders. | 18. Tags and tag-fasteners. |
| 7. Eyelets. | 19. Ticket-clasps. |

CLASS 54.—HARNESS. (XI.)

Sub-classes.

- | | |
|------------------------------|-------------------------|
| 40. Billet-loops. | Harness— |
| 1. Bonnets and covers. | 12. Saddles, |
| 41. Breast-strap elides. | 13. Tools. |
| 2. Bridle-bite. | 35. Hitching-straps. |
| 3. Bridles and halters. | 16. Horse-boots. |
| 37. Check hooks and terrets. | 17. Horse-collars. |
| 38. Checking and unchecking. | 31. Ox-yokes. |
| 4. Collar-fasteners. | 36. Rein-buttons— |
| 5. Collar-machines. | 32. Holders, |
| 6. Fly-nets. | 39. Supports. |
| 8. Hame-fasteners. | 21. Riding-saddles. |
| 23. Hame-tugs. | 22. Spurs and stirrups. |
| 9. Hames. | 24. Trace-carriers. |
| 10. Harness— | 25. Trimmings. |
| 29. Attachments, | 26. Tugs. |
| 11. Machines, | 27. Whips. |
| 30. Pads, | 33. Whip-sockets. |

CLASS 60.—HOSE AND BELTING. (XI.)

Sub-classes.

- | | |
|--------------------|---------------------|
| 1. Belt-fasteners— | 3. Belting. |
| 2. Machines, | 4. Hose and tubing. |
| 7. Stretchers. | 5. Hose-machines. |

CLASS 69.—LEATHER-WORKING MACHINERY. (XI.)

Sub-classes.

- | | |
|--------------|---------------|
| 1. Cutting. | 4. Splitting. |
| 3. Machines. | |

DIVISION XII.

EXAMINER AUGHINBAUGH.

CLASSES.—192, Clutches; 193, Conveyers; 212, Cranes and Derricks; 187, Elevators; 57, Hoisting; 64, Journal-Boxes, Pulleys, and Shafting; 74, Machine Elements; 186, Store-Service.

CLASS 192.—CLUTCHES. (XII.)

Sub-classes.

- | | |
|---|--|
| 1. Clutches. | 8. Longitudinally-movable, single-face. |
| 2. Eccentric or wedge. | 9. Longitudinally-movable, with projections. |
| 3. Expansible segment. | 19. Magnetic. |
| 18. Fluid. | 10. Multiple-disk. |
| 4. Frictional and positive. | 11. Radially-movable shoes. |
| 15. Intermittent grip— | 12. Radially-movable shoes, opposing. |
| 17. Ratchet, | 13. Split-ring. |
| 16. Strap and dog or ball. | 14. Strap. |
| 5. Lever-shoe. | |
| 6. Locking-pawl. | |
| 7. Longitudinally-movable, double-face. | |

CLASS 193.—CONVEYERS. (XII.)

Sub-classes.

- | | |
|------------------------------------|--|
| 1. Conveyers. | 11. Reciprocating. |
| 2. Endless— | 12. Retransfer and weighing. |
| 3. Adjustable leg, | 13. Screw. |
| 4. Belt, | 20. Store-house. |
| 5. Boot, | 14. Thrasher attachments— |
| 6. Buckets, | 15. Foldable, |
| 7. Buckets, with traction-rollers, | 16. Laterally and vertically adjustable, |
| 8. Flights, | 17. Oscillatory, |
| 9. Hooks. | 18. Vertically-adjustable. |
| 10. Pneumatic— | 19. Trimmers. |
| 21. Stackers. | |

CLASS 212.—CRANES AND DERRICKS. (XII.)

Sub-classes.

- | | |
|--|--|
| 1. Cranes and derricks. | 9. Rotary load-support— |
| 2. Rectilinearly-movable load-support— | 10. Vertically-adjustable jib, |
| 3. Electric, | 11. Motor-operated— |
| Hydraulic, | 12. Vertically-adjustable jib. |
| 4. Load-lifting devices, | 13. Rotary rectilinearly-movable load-support. |
| 5. Longitudinal-shaft driver, | 14. Stationary load-support— |
| 6. Stationary motor, | 15. Jib. |
| 7. Traveling motor. | |

CLASS 187.—ELEVATORS. (XII.)

Sub-classes.

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|---|--|
| 10. Adjustable balances. | Safety devices— |
| 11. Automatic stops. | 25. Slack-cable stops, |
| 12. Chairs. | 19. Speed-governors— |
| 13. Combined locks and automatic stops. | 20. Fluid-retarders, |
| 2. Controllers— | 23. Well-bottom cushions, |
| 35. Running-rope. | 24. Well-obstruction. |
| 14. Counterweights. | 9. Screw. |
| 3. Dumb-waiters. | 26. Screw and traveling sheave or block. |
| 1. Elevators. | Well-doors— |
| 15. Guides. | Horizontal— |
| 5. Hod. | 27. Horizontal hinge, |
| 6. Indicators. | 28. Horizontally-slidable, |
| 7. Lazy-tongs. | 29. Vertical hinge, |
| 16. Locks. | 30. Vertically-slidable, |
| 17. Mail. | Vertical— |
| 8. Safety devices— | 31. Horizontal hinge, |
| 18. Door-locked controllers, | 32. Horizontally-slidable, |
| 21. Overwinding, | 33. Vertical hinge, |
| 22. Shaft-guide catches and grips, | 34. Vertically-slidable. |

CLASS 57.—HOISTING. (XII.)

Sub-classes.

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|------------------------------|--|
| 107. Bale and box hooks. | Lifters— |
| 2. Barrel-rollers. | 15. Lifting-jacks— |
| 34. Block and tackle— | 97. Bar and cam-lever, |
| 5. Differential pulleys. | 43. Lever, |
| 22. Capstans and windlasses— | 98. Lever, bar, and clutch-loop, |
| 82. Capstans, | 99. Lever, bar, and double-acting pawls, |
| 83. Drum and clutch, | 100. Lever, bar, and pawl, |
| 84. Hand-crank operated, | 101. Lever and lifting-bar, |
| 85. Lever-operated, | 102. Rack and pinion, |
| 86. Steam-winch, | 44. Screw. |
| 87. Sweep-operated, | 16. Loading and unloading— |
| 88. Wild-cat, | 52. Hay, |
| 89. Windlass with capstan. | 90. Hoist and dnm, |
| 37. Chutes. | 91. Hoist, raised track, and dump, |
| 67. Elevated carriers— | 81. Load-binders, |
| 68. Draft-sustaining, | 46. Pilers, |
| 69. Lever-lock, | 92. Raised track, |
| 70. Non-lowering support, | 93. Raised track, track-end dump, |
| 71. Ratchet-lock, | 94. Raised track, track-end dump, tilting track-section, |
| 72. Rope-catch, | 47. Shoveling devices, |
| 73. Sheave-frame catch, | 77. Tilting-platform, |
| 96. Ways. | 95. Vertical hoist and dump. |
| 9. Grapples. | 18. Skids. |
| Hay-forks— | 53. Stackers. |
| 39. Corkscrew, | 19. Stump-extractors— |
| 40. Grapple, | 103. Drum, |
| 41. Harpoon, | 104. Lever, |
| 42. Tilting. | 105. Lever and drum, |
| 11. Hay-slings. | 106. Screw. |
| 13. Hoisting-buckets. | 79. Wagon-raisers. |
| 108. Lewises. | |
| Lifters— | |
| 109. Barrel and box, | |
| 110. Picture, | |
| 111. Spittoon, | |
| 112. Spool, | |
| 113. Store-goods. | |

CLASS 64.—JOURNAL-BOXES, PULLEYS, AND SHAFTING. (XII.)

Sub-classes.

- | | |
|-------------------------------|------------------------|
| 27. Axles, lubricating. | Journal-boxes— |
| 4. Belt-shifters. | Roller-bearings— |
| 5. Belt-tighteners. | 36. Ball, |
| 7. Compensating journals. | 37. Ball and cylinder, |
| 21. Idle-pulley supports. | 38. Cylinder— |
| 10. Journal-boxes— | 39. Circular series. |
| 20. Brasses, | 25. Thrust-bearings. |
| 19. Compositions, | 17. Pulleys— |
| 22. Gnarde, | 8. Expansible, |
| 23. Lids, | 40. Grip, |
| 24. Lubricating— | 26. Lubricating, |
| 31. Band-applying, | 18. Split. |
| 32. Centrifugal, | 12. Shaft-casings— |
| 28. Coolers, | 13. Couplings, |
| 33. Roller-applying— | 14. Hangers. |
| 34. Elastically-supported, | 29. Shafting— |
| 35. Yieldably-supported pads. | 30. Flexible. |

CLASS 74.—MACHINE ELEMENTS. (XII.)

Sub-classes.

- | | |
|-------------------------|------------------------------|
| 1. Cams and eccentrics. | Gearing— |
| 5. Cranks and levers— | 29. Yieldable. |
| 33. Handles. | 8. Gibs and keys. |
| 6. Fly-wheels. | 13. Machine-brakes— |
| 7. Gearing— | 37. Strap. |
| 21. Belt, | 14. Mechanical movements. |
| 26. Frictional, | 20. Overcoming dead-centers. |
| 34. Planetary— | 16. Pawls and ratchets. |
| 35. Eccentric, | 17. Pitmen. |
| 36. Screw, | 27. Racks and pinions. |
| 28. Sectional, | 18. Treadles— |
| 31. Sprocket— | 30. Hand attachments. |
| 32. Sprocket-chains, | 19. Universal joints. |

CLASS 186.—STORE-SERVICE. (XII.)

Sub-classes.

- | | |
|-------------------------|----------------|
| 3. Buffers. | 2. Propulsion— |
| 4. Carriers— | 11. Cable. |
| 5. Wheeled. | 12. Spreaders. |
| 6. Elevators and drops. | 7. Switches. |
| 1. Gravity. | |

DIVISION XIII.

EXAMINER BLODGETT.

CLASSES.—86, Arms and Projectiles: Making; 59, Chains, Staples, and Horseshoes; 30, Cutlery; 53, Hardware-Making; 10, Metal Bolts, Nuts, Rivets, and Screws; 77, Metal Boring and Drilling; 205, Metal-Drawing; 78, Metal-Forging; 80, Metal-Rolling; 76, Metal Tools and Implements: Making; 134, Metal-Tube Manufacture; 82, Metal Turning, Planing, and Milling; 206, Metal-Welding; 85, Nails and Spikes; 163, Needles and Pins; 152, Wagon, Car, and Track Irons.

CLASS 86.—ARMS AND PROJECTILES. MAKING (XIII.)

Sub-classes.

- | | |
|----------------------|-------------------------|
| 1. Arms. | 4. Cartridges and caps. |
| 2. Bullets and shot. | 5. Gun-barrels. |
| 3. Cannon and ball. | 7. Rifling. |

CLASS 59.—CHAINS, STAPLES, AND HORSESHOES.

(XIII.)

Sub-classes.

- | | |
|----------------------------|------------------------|
| 1. Chains. | 6. Horseshoe-machines. |
| 2. Chain and link making. | 7. Staples. |
| 4. Horseshoe-bars. Making | 8. Staples. Making |
| 5. Horseshoe-calks. Making | |

CLASS 30.—CUTLERY. (XIII.)

Sub-classes.

- | | |
|-----------------------------|--------------------------|
| 1. Animal-shears. | Knives— |
| 2. Buttonhole-cutters. | 8. Hay, |
| 3. Can-openers. | 10. Pocket. |
| 16. Envelope-openers. | 11. Pruning implements. |
| 21. Fork-guards. | 12. Razors. |
| 5. Forks. | 13. Scissors and shears. |
| 22. Forks and spoons. Solid | 14. Twine-cutters. |
| 9. Knives— | 15. Wick-trimmers. |
| 20. Gage, | 17. Wire-shears. |

CLASS 53.—HARDWARE-MAKING. (XIII.)

Sub-classes.

- | | |
|-----------------------------------|------------------------------|
| 1. Bridge-irons. | 9. Miscellaneous. |
| 2. Builders' hardware. | 20. Musical-instrument work. |
| 3. Cutlery. | 21. Printing appliances. |
| 4. Eyebolts and hooks. | 13. Spinners' and weavers'. |
| 6. Ferrules, rings, and thumbles. | 15. Spoons. Manufacture of |
| 8. Gas and water fittings. | 16. Springs. |
| 10. Hinges. | 22. Stamping. |
| 11. Leather-workers' hardware. | 17. Sucker-rod joints. |
| | 18. Umbrella-irons. |

CLASS 10.—METAL BOLTS, NUTS, RIVETS, AND SCREWS. (XIII.)

Sub-classes.

- | | |
|--|-------------------------------|
| 1. Bolts and nuts. Dressing and assembling | 8. Screws. |
| 2. Bolts and rivets. | 9. Screw-blank feeders. |
| 3. Bolts and rivets. Making | 10. Screw-cutting machines. |
| 4. Capping screws and nails. | 11. Screw-swaging machines. |
| 5. Metal-screw machines. | 12. Screw-tapping machines. |
| 6. Nuts and washers. | 13. Screw-threading machines. |
| 7. Nuts and washers. Making | 14. Taps and dies. |
| | 15. Wood-screw machines. |

CLASS 77.—METAL BORING AND DRILLING. (XIII.)

Sub-classes.

- | | |
|------------------------------------|------------------------|
| 1. Bits. | 5. Drills, Hand— |
| 2. Boring and drilling appliances. | 9. Ratchet. |
| 3. Boring-machines. | 6. Drilling-machines. |
| 4. Drill-chucks. | 7. Reamers and drifts. |
| | 8. Tapping mains. |

CLASS 205.—METAL-DRAWING. (XIII.)

Sub-classes.

- | | |
|-----------------|--------------|
| 1. Bars. | 2. Tubes. |
| 5. Draw-plates. | 3. Wire— |
| 7. Lubricants. | 8. Covering, |
| 6. Roller-dies. | 4. Reels. |

CLASS 78.—METAL-FORGING. (XIII.)

Sub-classes.

- | | |
|-------------------|-------------------------|
| 1. Anvils. | 11. Riveting. |
| 16. Compressing. | 18. Shafts and pulleys. |
| 3. Drop-hammers. | 19. Structural work. |
| 5. Forging. | 15. Upsetting metal. |
| 8. Olivers. | 21. Wire pointing. |
| 9. Power-hammers. | |

DIVISION XIII.—CONTINUED.

CLASS 80.—METAL-ROLLING. (XIII.)

Sub-classes.

- | | |
|-------------------------|------------------------------|
| 11. Angle-irons. | 13. Reworking. |
| 1. Cylindrical. | 14. Rods for wire. |
| 2. Foil. Manufacture of | 7. Rolling. Miscellaneous |
| 3. Mill appliances. | 9. Sheet and hoop iron manu- |
| 8. Plates and bars. | facture. |
| 5. Puddlers' balls. | 10. Taper. |
| 6. Railroad-rails. | |

CLASS 206.—METAL-WELDING. (XIII.)

Sub-classes.

- | | |
|-------------------|-------------------|
| 7. Fluxes. | Ingots and piles— |
| Ingots and piles— | 6. Tube. |
| 2. Bar. | Metal-working— |
| 3. Beam. | 8. Electric. |
| 4. Plate. | 1. Welding. |
| 5. Rail. | |

CLASS 76.—METAL TOOLS AND IMPLEMENTS. MAKING (XIII.)

Sub-classes.

- | | |
|--------------------------------------|--------------------------------|
| 1. Angers. | 14. Pitchforks. |
| 2. Axes and hatchets. | 15. Plow-irons. |
| 27. Compound metal-working machines. | 16. Rake and harrow irons. |
| 3. Cultivator-irons. | 26. Saw clamps and jointers. |
| 4. Dies. | 19. Saw-setting. |
| 5. Drills. | 22. Saw-awaging. |
| 6. Farm implements. | 17. Saws. |
| 7. File-blanks. | 18. Saws. Gumming |
| 8. File-cutting. | 20. Saws, sharpening. Recipro- |
| 9. Files and rasps. | cating tool |
| 10. Hammers. | 21. Saws, sharpening Rotary |
| 11. Harvester-irons. | tool |
| 12. Hoes and shovels. | 23. Scythes. |
| 13. Picks and mattocks. | 24. Tools and implements. |
| | 25. Wrenches. |

CLASS 85.—NAILS AND SPIKES. (XIII.)

Sub-classes.

- | | |
|---------------------------------|----------------------------|
| 1. Cut-nail making. | 18. Nail-heads. Ornamental |
| 3. Horseshoe-nail-blank finish- | 8. Nail-plate feeders. |
| ing. | 9. Nails and spikes. |
| 2. Horseshoe-nail cutting. | 15. Shoe nails and tacks. |
| 4. Horseshoe-nail forging. | 16. Spike-making. |
| 6. Nail-distributers. | 17. Wrought-nail making. |

CLASS 134.—METAL-TUBE MANUFACTURE. (XIII.)

Sub-classes.

- | | |
|----------------|-------------------|
| 10. Bent seam. | Seamless— |
| 3. Cross weld. | Rolling— |
| 11. Lining. | 5. Longitudinal, |
| 8. Mandrels. | 6. Spiral. |
| 4. Seamless— | 2. Spiral weld. |
| Rolling— | 1. Straight weld. |
| 7. Cross, | 9. Tubes. |

CLASS 163.—NEEDLES AND PINS. (XIII.)

Sub-classes.

- | | |
|----------------------------|---------------------------|
| 1. Machine-needles. Making | 5. Pins. Papering |
| 4. Pins. Making | 6. Sewing-needles. Making |

CLASS 82.—METAL TURNING, PLANING, AND MILLING. (XIII.)

Sub-classes.

- | | |
|--------------------------------|---------------------------|
| 1. Centerers. | Planers— |
| 2. Cutters and cutter-holders. | 12. Rotary bed or cutter. |
| 4. Gear-cutting. | 13. Rests. |
| 5. Key-seat cutters. | 14. Shaping and slotting. |
| 6. Lathe-chucks. | Turning— |
| 7. Mandrels and work-holders. | 15. Irregular forms, |
| 8. Milling. | 16. Miscellaneous, |
| 9. Milling-cutters. | 17. Tapers, |
| 10. Planer-chucks. | 18. Wheels and axles. |
| Planers— | 19. Watchmakers' lathes. |
| 11. Reciprocating bed or cut- | 20. Wrist-pin turners. |
| ter, | |

CLASS 152.—WAGON, CAR, AND TRACK IRONS. (XIII.)

Sub-classes.

- | | |
|---------------------------------|---------------------------------|
| 1. Car axles and boxes. Making | 8. Repairing and capping rails. |
| 2. Car and locomotive irons. | 10. Tire-npsetting. |
| 3. Carriage clips and shackles. | 11. Track-irons. Miscellaneous |
| 4. Carriage-irons. Miscella- | 12. Wagon axles and boxes. |
| neous | Making |
| 5. Car-wheels and tires. | 13. Wagon tires and fellies. |
| 6. Fifth-wheels. Making | Making |
| 7. Railway-chairs. | |

DIVISION XIV.

EXAMINER MAXSON.

CLASSES.—194, Coin-Controlled Apparatus; 168, Farriery; 153, Metal-Bending; 201, Metal-Ornamenting; 79, Metal Personal Wear: Making; 164, Metal Punching and Shearing; 81, Metal-Working Tools; 151, Nut and Bolt Locks; 113, Sheet-Metal Ware: Making; 140, Wire-Working.

CLASS 194.—COIN-CONTROLLED APPARATUS. (XIV.)

Sub-classes.

- | | |
|--|-----------------------|
| 1. Article-delivery— | Fraud-preventives— |
| 26. Chance, | 34. Washer-catchers. |
| 2. Oscillatory, | 30. Gasometers. |
| 3. Rotatory, | 13. Height-measurers. |
| 4. Sheet-feed, | 14. Induction-coils. |
| 5. Slidable pusher, coin-engaged, | 15. Loan-receptacles. |
| 6. Slidable pusher, detent, | 16. Miscellaneous. |
| 7. Slidable pusher, detent and handle, | 31. Music-boxes. |
| 27. Spiral. | 35. Opera-glasses. |
| 32. Boot-blackening. | 17. Photographs. |
| 28. Chairs. | 18. Photographic. |
| 29. Dice-throwers. | 19. Race-courses. |
| 8. Door and turnstile locks. | 36. Shooting devices. |
| 9. Exhibitors, movable-object— | 25. Telephones. |
| 10. Surface. | 20. Testers— |
| 11. Fluid-delivery. | 21. Lung, |
| 12. Fraud-preventives— | 22. Strike. |
| 33. Magnets. | 23. Weighing— |
| | 24. Recorders. |

CLASS 168.—FARRIERY. (XIV.)

Sub-classes.

- | | |
|--------------------------------|-------------------------|
| 10. Calks. | Shoes— |
| 1. Calk-sharpeners. | 13. Ox, |
| 2. Hoof and shoe spreaders. | 14. Removable-calk, |
| 3. Hoof cleaners and trimmers. | 15. Soft-tread, |
| 5. Hoof-pads. | 16. Swamp. |
| 6. Shoes— | 7. Shoe-nail clinchers. |
| 11. Composite. | 8. Shoeing-stands. |
| 12. Nailless. | 9. Toe-weights. |

CLASS 153.—METAL-BENDING. (XIV.)

Sub-classes.

- | | |
|-------------------------------|-----------------------|
| 1. Bending— | 5. Dishing plates. |
| 11. By press, | 6. Flanging— |
| 12. By rolls. | 7. Straight. |
| 2. Coiling. | 8. Straightening— |
| 13. Coiling and bending pipe. | 9. Plates and sheets. |
| 3. Corrugating. | 10. Twisting. |
| 4. Curving plates. | |

CLASS 201.—METAL-ORNAMENTING. (XIV.)

Sub-classes.

- | | |
|-----------------|---------------|
| 1. Ornamenting. | 3. Rolling. |
| 2. Pressing. | 4. Stippling. |

CLASS 79.—METAL PERSONAL WEAR. MAKING (XIV.)

Sub-classes.

- | | |
|------------------------|-----------------------------|
| 1. Buttons and clasps. | 4. Personal wear. |
| 2. Eyelets. | 5. Thimbles. Manufacture of |
| 3. Ornamental chains. | 6. Watches and clocks. |

CLASS 164.—METAL PUNCHING AND SHEARING. (XIV.)

Sub-classes.

- | | |
|------------------------------------|------------------------------|
| 6. Combined punching and shearing. | Punching— |
| 1. Cutting. | 13. Hand-lever, |
| 7. Fence-barbs of sheet metal. | 14. Rotary, |
| 9. Punches. | 15. Screw. |
| 2. Punching— | 3. Sawing. |
| 10. Crank, | 5. Shears. Lever and sliding |
| 11. Foot-lever, | 4. Shears. Rotary |
| 12. Hammer, | 8. Tie-bands. |

CLASS 81.—METAL-WORKING TOOLS. (XIV.)

Sub-classes.

- | | |
|-------------------------------|-------------------------------|
| 26. Bolt-holders. | Pipe-wrenches— |
| 23. Cutting sharpeners. | 29. Expanding-jaw, |
| 24. Nippers. | 13. Pivoted-jaw, |
| Nut-wrenches— | 14. Pivoted-jaw, with cutter, |
| 5. Pivoted and spring jaw, | 15. Rigid-jaw and spanner, |
| 6. Ratchet-wheel, | 16. Sliding-jaw, |
| 7. Rigid-jaw, | 17. Sliding-jaw, with cutter. |
| 8. Rigid-socket and axle-nut, | 25. Pliers— |
| 9. Sliding-jaw, | 18. Rod and bolt cutters, |
| 27. Wheel. | 19. Smiths' tongs. |
| Pipe-cutters— | 20. Pipe and rod, |
| 10. Inside, | 21. Smiths', |
| 11. Outside, | 22. Woodworkers'. |
| 12. Pipe-expanders. | |
| Pipe-wrenches— | |
| 28. Chain, | |

CLASS 151.—NUT AND BOLT LOCKS (XIV.)

Sub-classes.

- | | |
|---------------------------|-----------------------------|
| 1. Base, key and ratchet. | 5. Thread. |
| 2. Base, washer. | 6. Thread, key and ratchet. |
| 3. Side, | 7. Top. |
| 4. Side, key and ratchet. | 8. Top, key and ratchet. |

CLASS 113.—SHEET-METAL WARE. MAKING (XIV.)

Sub-classes.

- | | |
|---------------------------------|----------------------------|
| 23. Burnishing. | Soldering— |
| 1. Cutting printers' leads. | Machines— |
| 2. Edging sheets. | Dip— |
| 35. Lamp-work. | 39. Reciprocating carrier, |
| 34. Pens, pencils, and holders. | 40. Rotary table-carrier, |
| 3. Roller-tools. | 29. Endless-chain carrier, |
| 4. Screw-thread bending. | 30. Rotary table-carrier. |
| 5. Seaming sheets. | 27. Soldering. |
| 24. Spinning. | 10. Solders. |
| 36. Stamping. | Tubing— |
| 11. Tools. | 13. Curved and spouts. |
| 12. Troughs and moldings. | 14. Grooving and seaming. |
| Soldering— | 15. Pipe-elbows. Making |
| 6. Clamps— | 16. Straight. Making |
| 32. Expanding mandrel, | Vessels— |
| 31. Trough. | 17. Bending. Angular— |
| 37. Fluxes. | 18. Curved. |
| 7. Irons— | 19. Seaming. Die— |
| 25. Heaters— | 21. Roller. |
| 33. Electric. | 20. Shaping. Die— |
| 8. Machines— | 28. Fillers and forcera. |
| 26. Dip— | 22. Wiring and flanging. |
| 38. Endless-chain carrier, | |

CLASS 140.—WIRE-WORKING. (XIV.)

Sub-classes.

- | | |
|-------------------------------------|-------------------------------|
| 31. Attaching card-clothing. | Fabrics— |
| 1. Barbing— | Making— |
| 12. Sheet-metal, | 33. Twisted, |
| 23. Tools. | 20. Working. |
| 3. Bending. | 21. Feeding and tension. |
| 4. Bending and coiling. | 13. Heddles. Making |
| 5. Bending and twisting. | 14. Joining. |
| 6. Coiling— | 15. Reels and spools. |
| 26. By mandrel, definite lengths, | 16. Tools. |
| 27. By mandrel, indefinite lengths. | 24. Winding. |
| 25. By rolls. | 17. Wiring bottles and corks— |
| 7. Covering. | 18. Brushes and cards, |
| 8. Cutting and straightening. | 19. Wood— |
| 9. Fabrics— | 11. Fences— |
| 10. Making— | 23. Gear, |
| 32. Coiled. | 29. Rack-bar, |
| | 30. Sprocket, |
| | 23. Fencing. |

DIVISION XV.

EXAMINER BRICKENSTEIN.

CLASSES.—106, Artificial Stone, Lime, and Cement; 107, Bread, Cracker, and Lozenge Making; 18, Caoutchouc and Minor Plastics; 25, Clay and Pottery; 154, Composite Roofings and Coverings; 44, Fuel; 49, Glass; 92, Paper-Making; 94, Paving.

CLASS 106.—ARTIFICIAL STONE, LIME, AND CEMENT. (xv.)

Sub-classes.

- | | |
|-----------------|----------------|
| 1. Composition. | 5. Plastering— |
| 3. Limekilns. | 9. Fiber, |
| 4. Molds. | 7. Implements, |
| 6. Processes. | 8. Retarders. |

CLASS 107.—BREAD, CRACKER, AND LOZENGE MAKING. (xv.)

Sub-classes.

- | | |
|--------------------------------|-------------------------------|
| 1. Bread and cracker machines. | 4. Mixers and kneaders. |
| 3. Cake-cutters. | 2. Pastry-boards. |
| 9. Confectionery-machines. | 7. Pie crimpers and trimmers. |
| 6. Lozenge-machines. | 8. Rolling-pins. |

CLASS 18.—CAOUTCHOUC AND MINOR PLASTICS. (xv.)

Sub-classes.

- | | |
|-------------------------------|---------------------------|
| Caoutchouc— | Minor plastics— |
| 22. Articles, | 15. Coating and embossing |
| 4. Fabrics, | moldings, |
| 5. Hard rubber, | 19. Compositions, |
| 6. Machine for coating, | 14. Crayon-machines, |
| 8. Soft rubber, | 18. Fibrous compositions, |
| 9. Vulcanizing apparatus. | 17. Insulating compounds, |
| Minor plastics— | 13. Molding devices, |
| 23. Articles, | 12. Pill-machines, |
| 1. Artificial ivory, | 20. Processes, |
| 16. Button machines and dies, | 10. Vulcanized fiber. |
| 3. Celluloid, | |

CLASS 25.—CLAY AND POTTERY. (xv.)

Sub-classes.

- | | |
|-------------------------|------------------------------|
| 1. Bricks. | 24. Brick-making implements. |
| Brick-kilns— | 6. Brick-molds— |
| 18. Continuous— | 25. Sanders. |
| 19. Tunnels, | 26. Brick and tile cutters. |
| 20. Downdraft, | 8. Drain-tiles. |
| 35. Furnaces, | 9. Paving-tiles. |
| 22. Reversible-draft, | 10. Pottery articles— |
| 21. Updraft, | 11. Kilns, |
| 23. Vertical. | 12. Machines. |
| Brick-machines— | 13. Pugmills. |
| 27. Hydraulic, | 16. Sarcophagi. |
| 4. Reciprocating, | 17. Tile-machines— |
| 29. Rotary, horizontal, | 31. Continuous, |
| 30. Vertical, | 32. Dies, |
| 5. Screw, | 33. Socket-formers, |
| 28. Traveling molds. | 34. Tampers. |

CLASS 154.—COMPOSITE ROOFINGS AND COVERINGS. (xv.)

Sub-classes.

- | | |
|----------------------|-----------------|
| 1. Apparatus. | 2. Composition. |
| 4. Boiler-coverings. | 3. Felt. |

CLASS 44.—FUEL. (xv.)

Sub-classes.

- | | |
|-------------------|--------------------|
| 1. Artificial. | 3. Peat-machines. |
| 2. Fire-kindlers— | 4. Purifying coal. |
| 5. Absorbers, | |
| 6. Automatic. | |

CLASS 49.—GLASS. (xv.)

Sub-classes.

- | | |
|---------------|-----------------------|
| 1. Articles. | 8. Ornamentation. |
| 2. Cutters. | 10. Plate and window. |
| 4. Enameling. | 9. Processes. |
| 7. Molds. | 11. Tools. |

CLASS 92.—PAPER-MAKING. (xv.)

Sub-classes.

- | | |
|---------------------------------------|----------------------------------|
| 1. Bleaching. | 12. Ornamenting. |
| 2. Bronzing-machines. | 13. Paper-board. |
| 3. Calendering. | 14. Paper-hanging machines. |
| 24. Carpet-lining. | 15. Paper-making machines. |
| 4. Coating. | 16. Parchment. |
| 5. Digesters. | 17. Processes. |
| 6. Disintegrating fibrous substances. | 18. Pulp-engines and bed-plates. |
| 7. Fabrics. | 19. Pulp washing and strain- |
| 8. Fibers. | ing. |
| 9. Flocking. | 20. Rag dusters and engines. |
| 10. Materials. | 21. Stock-grinders. |
| 11. Molding machines and articles. | 22. Waterproofing and sizing. |
| | 23. Wood-grinders. |

CLASS 94.—PAVING. (xv.)

Sub-classes.

- | | |
|--------------|------------------|
| 2. Gutters. | Pavements— |
| Pavements— | 8. Wood. |
| 1. Concrete, | 4. Road-rammers. |
| 3. Iron, | 6. Tools. |
| 5. Stone, | 7. Vault-covers. |

DIVISION XVI.

EXAMINER BISSING.

CLASSES.—176, Electric Lighting; 177, Electric Signaling; 175, Electricity: Special Applications; 178, Telegraphy; 179, Telephony.

CLASS 176.—ELECTRIC LIGHTING. (XVI.)

Sub-classes.

Cut-outs—	Positive-feed—
80. Electromagnetic,	219. Electric gear-clutch,
190. Hanger,	109. Gear-clutch,
79. Mechanical,	220. Step gear-clutch.
154. Oscillating snap,	Lights—
178. Oscillating spring,	112. Special features,
155. Rotary,	110. Arc and incandescent—
156. Sliding,	111. Non-feeding,
78. Thermal—	180. Ceiling-block,
192. Branch,	102. Filaments and carbons,
193. Lamp,	18. Incandescent—
194. Plug,	113. Special features,
195. Successive.	196. Stopper,
Lights—	98. Sockets and keys,
Arc—	19. Systems—
104. Gravity-feed—	166. Automatic-regulation,
105. Clutch,	129. Car,
216. Double-dog clutch,	197. Display,
106. Gear-clutch,	167. Hand-regulation,
217. Pivot-dog clutch,	198. Safety,
218. Ring-clutch,	130. Secondary-battery,
107. Positive-feed—	131. Test.
108. Clutch,	

CLASS 178.—TELEGRAPHY. (XVI.)

Sub-classes.

Telegraphs—	Telegraphs—
46. Automatic,	Printing—
45. Circuits and systems,	142. Wheel,
47. Dial,	55. Quadruplex,
48. Duplex,	56. Railway-car,
49. Dynamo,	63. Reed.
50. Fire—	10. Circuit-closers—
160. Automatic,	202. Burglar,
162. Engine-house apparatus,	203. Lock,
163. Non-interfering,	204. Retarded,
165. Repeaters,	128. Thermal.
164. Variable signal—	12. Condensers.
161. Dial,	29. Keys.
103. Fire alarms and extinguishers,	30. Lightning-arresters—
51. Multiplex,	214. Magnetic,
52. Perforating,	215. Thermal.
54. Printing—	35. Morse registers.
141. Multiple-wheel,	41. Relays and sounders.
	42. Repeaters.
	69. Transmitters.

CLASS 177.—ELECTRIC SIGNALING. (XVI.)

Sub-classes.

1. Alarms—	26. Indicators—
199. Æquoreal,	139. Station.
200. Barokinetic,	38. Railway—
2. Burglar,	147. Block,
201. Safe.	146. Block systems,
3. Annunciators—	148. Cab—
139. Drop,	149. Sectional rail,
157. Drop system,	150. Sectional rail,
140. Step-by-step,	151. Track instruments.
158. Time.	39. Recorders.
7. Bells.	

CLASS 179.—TELEPHONY. (XVI.)

Sub-classes.

82. Anti-induction devices.	Telephones—
81. Conductors. Anti-inductive	100. Supports,
Telephones—	85. Switchboards,
57. Calls—	71. Switches,
143. Reed,	64. Systems—
144. Step-by-step,	101. Automatic,
145. Strength and polarity,	186. Central,
58. Details,	133. Divided central,
59. Electric—	187. House,
184. Granular,	134. Intermediate sub-station,
185. Multiple-electrode,	135. Multiple switch-board—
60. Magnetic,	136. Divided central,
62. Radiophones,	137. Test.
77. Relays and repeaters,	

CLASS 175.—ELECTRICITY. SPECIAL APPLICATIONS. (XVI.)

Sub-classes.

4. Applications. General	Igniting devices—
181. Demagnetizing.	116. Manual,
21. Electromagnets.	91. Portable.
Igniting devices—	182. Ore-detectors.
115. Automatic,	183. Testing.
117. Inductional,	

DIVISION XVII.

EXAMINER RICE.

CLASSES.—93, Paper-Manufactures; 101, Printing.

CLASS 93.—PAPER-MANUFACTURES. (XVII.)

Sub-classes.

- | | |
|---------------------------------|---------------------------------|
| 2. Articles. | Cutters— |
| 5. Bag-machines— | Rotary— |
| 38. Blank-formers, | 30. Traveling, |
| 39. Transverse central folders, | 31. Traveling, |
| 40. Triangular folders, | 15. Envelopes. |
| 41. Tube-closers, | 16. Envelope-machines. |
| 42. Tube-formers, | 18. Folding. |
| 43. Tube formers and closers, | 54. Label-affixers— |
| 44. Tube formers and openers, | 55. Cutter and plunger, |
| 45. Tube formers, openers, and | 56. Magazine, |
| closers— | 57. Pickers, |
| 46. Openers, Roll | 58. Runway-machines— |
| 47. Openers, Side | 59. Label-bed. |
| 48. Tube-openers— | 19. Label and tag machines. |
| 49. Roll, | 21. Perforating and lace paper. |
| 50. Side, | 32. Reels. |
| 51. Tube openers and closers— | 33. Serving apparatus— |
| 52. Openers, Roll | 34. Printing attachment, |
| 53. Openers, Side. | 35. Roll-holders— |
| 10. Box-machines. | 36. Cutting attachment, |
| 11. Collar, end, and bosom ma- | 37. Feeding attachment. |
| chines. | 24. Tube-machines— |
| 27. Cutters— | 60. Folders, |
| 13. Reciprocating, | 61. Spiral-wind, |
| 14. Rotary— | 62. Straight-wind. |
| 28. Slitters and winders, | 25. Wrapping-machines. |
| 29. Transverse, | |

CLASS 101.—PRINTING. (XVII.)

Sub-classes.

- | | |
|------------------------------|---------------------------------|
| 1. Address-printers— | Inking apparatus— |
| 2. Strip-form. | 74. Fountains, |
| 3. Autographic registers. | 75. Pads and holders, |
| 4. Bed and cylinder ma- | 76. Rollers— |
| chines— | 77. Compositions, |
| 5. Cushions, | 78. Traveling ductor-plate, |
| 153. Multirevolution— | 79. Traveling roller and |
| 154. Perfecting, | plate. |
| 6. Oscillating-cylinder— | 80. Mail-marking machines— |
| 7. Perfecting, | 81. Rotary— |
| 8. Perfecting, | 82. Machines and stackers. |
| 155. Sliders, | 83. Marking-machines— |
| 9. Stop-cylinder— | 84. Rotary. |
| 10. Perfecting, | 85. Multicolor-machines— |
| 11. Traveling-cylinder— | 86. Bed and cylinder— |
| 12. Perfecting. | 87. Multiple impression, |
| 13. Bed and platen machines— | 88. Bed and platen, |
| 14. Inking attachment, | 89. Rotary— |
| 15. Oscillating— | 90. Multiple printing |
| 16. Roller-inker— | couple, |
| 17. Orbital. | 91. Supplemental forms. |
| 18. Roller and plate inker, | 92. Numbering-machines— |
| 19. Stationary roller-inker, | 93. Form attachments, |
| 20. Roller-inker, | 94. Hand, |
| 21. Roller and plate inker, | 95. Measurers and markers. |
| 22. Tympan-gages, | 96. Paper-damping machines— |
| 23. Web. | 97. Winders. |
| 24. Branding-stamps. | 98. Planographic machines— |
| 25. Chases. | 99. Bed and cylinder, |
| 27. Color-machines— | 100. Rotary. |
| 28. Coloring-tools. | 101. Plate. |
| 26. Composing-sticks. | Plate-machines— |
| 29. Deliveries— | 102. Bed and cylinder, |
| 30. Associators, | 103. Bed and platen, |
| 31. Droppers, | 104. Rotary. |
| 32. Fly-frames, | 105. Traveling-bed. |
| 33. Gripper-fiers, | 106. Press-copying— |
| 34. Receiving-tables. | 107. Damping, |
| 35. Electrotyping. | 111. Printing couple appli- |
| 36. Feeding— | ances— |
| 37. Gages— | 112. Anti-offset devices, |
| 38. Front stops, | 113. Blankets, |
| 39. Separators— | 114. Friskets and fingers, |
| 40. Buckling, | 115. Grippers. |
| 41. Pneumatic, | 116. Processes. |
| 151. Sheet-cutters, | 117. Rotary machines— |
| 42. Web. | 118. Associators— |
| 43. Folders— | 119. Stop-sheet, |
| 44. Longitudinal, | 120. Associators and folders, |
| 45. Longitudinal and rotary, | 122. Machines and associators, |
| 46. Newspaper-wrapping | 123. Machines and deliveries, |
| machines, | 125. Machines and folders, |
| 152. Oscillating, | 124. Machines, associators, and |
| 47. Reciprocating, | folders, |
| 48. Rotary, | 126. Non-perfecting, |
| 49. Sheet-conveyers. | 127. Reversing and perfecting, |
| 50. Furniture— | 121. Rotary conical printing |
| 51. Quoins, | couple. |
| 52. Tools and appliances. | 128. Ruling-machines— |
| 53. Galleys— | 129. Rotary. |
| 54. Galley-locks— | 130. Setting and distributing. |
| 55. Rests. | 131. Sheet-stencils. Making |
| 56. Hand-stamps— | 132. Stenciling-machines. |
| 57. Check-punches, | 133. Stencil-making pens. |
| 58. Head and handle— | 134. Stencil-plates. |
| 59. Inking attachment, | 135. Stereotyping— |
| 60. Mutilators, | 136. Casting-boxes, |
| 61. Roller— | 137. Matrices and materials. |
| 62. Inking attachment, | 138. Surfaces— |
| 63. Inking attachment, | 139. Bases, |
| 64. Mutilators, | 140. Holders— |
| 65. Perforators, | 141. Sliding-clamp, |
| 66. Sealing-tools, | 142. Planographic— |
| 67. Settable type-carrier— | 143. Hektographs, |
| 68. Clock set, | 144. Holders and supports, |
| 69. Inking attachment, | 145. Rules, |
| 70. Tumbler. | 146. Types. |
| 71. Inking apparatus— | 147. Ticket-machines. |
| 73. Composition rollers, | 148. Traveling-bed machines. |
| making and preserv- | 149. Type-cases. |
| ing, | 150. Type-machines. |

DIVISION XVIII.

EXAMINER FOWLER.

CLASSES.—162, Injectors and Ejectors; 160, Steam and Vacuum Pumps; 122, Steam-Boilers; 110, Steam-Boiler Furnaces; 121, Steam-Engines; 136, Steam-Engine Valves.

CLASS 162.—INJECTORS AND EJECTORS. (XVIII.)

No sub-classes.

CLASS 160.—STEAM AND VACUUM PUMPS. (XVIII.)

No sub-classes.

CLASS 122.—STEAM-BOILERS. (XVIII.)

Sub-classes.

- | | |
|-----------------------|----------------------------------|
| 1. Attachments. | 12. Introducing smoke and gases. |
| 5. Circulation. | 33. Manholes— |
| 2. Cleaners— | 13. Rotary. |
| 30. Steam or air jet. | 32. Safety devices. |
| 22. Feeders. | 14. Sectional— |
| 6. Fire-tube. | 34. Headers. |
| 7. Flashers. | 15. Separators. |
| 8. Flue and tubular. | 16. Superheaters. |
| Heating feed-water— | 17. Tubes and flues. |
| 29. Furnace-gases, | 4. Vapor-generators. |
| 20. Steam, | 27. Water-tube— |
| 21. Steam-injected. | 28. Coil. |
| 10. Incrustation. | 18. Water fire-boxes. |
| 11. Indicators. | |

CLASS 110.—STEAM-BOILER FURNACES. (XVIII.)

Sub-classes.

- | | |
|-------------------------------------|-------------------------------------|
| 1. Ash-pans. | 5. Furnaces. |
| 14. Attachments. | Grates— |
| 2. Doors for steam-boiler furnaces. | 10. Hollow, Air |
| Furnace-feeding— | 18. Hollow. Water |
| 3. Air, | 12. Smoke and gas returning. |
| 17. Chain grates, | 7. Spark-arresters for locomotives— |
| 4. Fael, | 13. Conductors for cars. |
| 15. Fine, | |
| 16. Steam. | |

CLASS 121.—STEAM-ENGINES. (XVIII.)

Sub-classes.

- | | |
|---------------------------------|-------------------------------------|
| 1. Attachments. | Engines— |
| Condensers— | 51. Single-acting, compound, |
| 25. Injector, | 59. Single-cylinder, |
| 26. Surface. | 19. Steam-steering. |
| 46. Cylinder relief-valves. | 6. Exhaust mechanism. |
| Engines— | 27. Exhaust regenerated. |
| 47. Bell-ringer, | 61. Lubricators. |
| 60. Combined engine and boiler, | 22. Mufflers. |
| 3. Compound— | Packing— |
| 58. Locomotive, | 28. Compound and textile for steam, |
| 16. Hammer, | 12. Metallic piston for steam, |
| 9. Locomotive, | 29. Rod for steam, |
| 35. Multiple-cylinder, | 32. Steam-joint for steam. |
| 48. Multiple-piston, | 53. Pistons. |
| 11. Oscillating, | 23. Speed-governors— |
| 13. Portable, | 37. Centrifugal, |
| 17. Pumping— | 38. Marine, |
| 49. Duplex, | 42. Pressure. |
| 18. Rock-drilling, | 54. Steam sanding devices. |
| 14. Rotary— | 20. Traps— |
| 57. Alternating-piston, | 43. Expansion. |
| 30. Concentric-piston, | 21. Valve-gear— |
| 31. Eccentric-piston, | 44. Link, |
| 36. Impact, | 45. Rod, |
| 34. Oscillating-piston, | 33. Shifting-eccentric— |
| 41. Reciprocating-piston, | 55. Automatic, |
| 50. Wabbling-piston, | 56. Tripping cut-off. |

CLASS 136.—STEAM-ENGINE VALVES. (XVIII.)

Sub-classes.

- | | |
|--------------------|---------------------|
| 1. Balanced-slide— | 12. Reversing. |
| 13. Double, | 7. Rotary. |
| 14. Roller. | 9. Safety. |
| 2. Cut-off. | 8. Slide. |
| 3. Gage-cocks. | 10. Steam-actuated. |
| 4. Governor. | 11. Throttle— |
| 5. Piston. | 15. Electric. |
| 6. Puppet. | |

DIVISION XIX.

EXAMINER STEWARD.

CLASS 126.—Stoves and Furnaces.

CLASS 126.—STOVES AND FURNACES. (XIX.)

Sub-classes.

Boilers—	Heating systems—
1. Agricultural,	Car—
16. Domestic—	131. Air,
17. Steamers,	133. Steam,
84. Stand.	132. Water,
Burners—	Local—
79. Hay and straw,	123. Air,
49. Refuse,	125. Steam,
9. Coffee and tea pots.	124. Water,
12. Corn-poppers.	122. Steam,
13. Dampers—	Train—
14. Automatic—	126. Air,
113. Balanced-motor,	130. Smoke,
110. Draft-operated,	129. Steam,
116. Electrical,	127. Water—
114. Expansion,	128. Steam,
111. Fluid-pressure,	121. Water—
109. Positive-connection,	139. Steam.
112. Pressure-motor.	38. Hot-air registers.
95. Dough-raisers.	136. Liquid sterilizers.
115. Draft-regulators—	Ovens—
Steam-injected.	4. Bakers'.
20. Fenders.	19. Domestic.
21. Fire-dogs.	87. Paint-breamers.
22. Fireplaces—	Pans—
89. Blowers,	2. Ash,
65. Fire-backs,	3. Bake,
23. Fronts,	80. Frying.
70. Hot-air.	94. Pipe-hangers.
25. Fire-pots and linings.	45. Platforms.
27. Foot-warmers.	47. Pot and lid lifters.
90. Fuel-boxes.	81. Pots and kettles.
Furnaces—	48. Ranges.
106. Bagasse,	51. Shovel, tongs, and pokers.
76. Cremation,	83. Snow and ice melters.
37. Hot-air—	72. Steam-radiator attach-
43. Magazine,	ments.
86. Steam,	85. Steam-radiators.
103. Hydrocarbon—	54. Steaming-tables.
104. Injector-burners,	55. Stove doors and windows.
105. Retort-vaporizers,	56. Hoods.
46. Portable.	57. Legs.
28. Glue-pots.	58. Lids and tops.
29. Grates—	59. Pipes.
96. Adjustable,	60. Pipe shelves.
98. Compound-movement,	61. Pipe thimbles.
97. Cut-offs,	62. Shelves.
24. Fireplace,	Stoves—
102. Raking attachment,	134. Car—
99. Reciprocating,	135. Protective casings,
100. Rocking-bar,	10. Cooking—
78. Rotary,	11. Hearths,
101. Vertical-movement.	41. Magazine,
108. Grates and grate-bars, sta-	50. Reservoir,
tionary.	71. Steam,
31. Gridirons.	66. Gas,
Heaters—	69. Heating—
5. Barrel,	92. Central air-tube,
137. Curling-irons,	34. Horizontal-hody,
15. Dish,	33. Hot-air,
26. Flat-iron,	35. Open-front,
138. Frictional,	36. Panel,
117. Electric—	93. Parlor,
118. Pressing and ironing,	39. Lamp,
40. Lunch,	44. Magazine—
82. Solar,	42. Fireplace,
52. Soldering-iron.	64. Vapor.
32. Heating-drums.	63. Tea-kettles.
Heating systems—	88. Waffle-irons.
119. Air—	
120. Steam or water,	

DIVISION XX.

EXAMINER WILKINSON.

CLASSES.—3, Artificial Limbs; 16, Builders' Hardware; 32, Dentistry; 70, Locks and Latches; 109, Safes; 27, Undertaking.

CLASS 3.—ARTIFICIAL LIMBS. (XX.)

Sub-classes.

- | | |
|------------------------|---------------------|
| 1. Arms and hands. | 3. Legs. |
| 4. Crutches. | 6. Leg-joints. |
| 5. Foot extensions. | 7. Plastic splints. |
| 2. Fracture apparatus. | |

CLASS 16.—BUILDERS' HARDWARE. (XX.)

Sub-classes.

- | | |
|--------------------------------|------------------------------|
| 1. Blind-stops. | Hinges— |
| 2. Bolts— | 109. Flush, |
| 60. Can, | 49. Gate, |
| 61. Double-door, | 111. Lock, frictional— |
| 67. Jail bolt-work, | 110. Positive, |
| 63. Multiple, | 112. Longitudinally-adjust- |
| 66. Operators, | able, |
| 64. Sliding, | 14. Safe, |
| 65. Sliding and rotary. | 25. Spring, |
| 3. Carpet-fasteners— | 27. Table, |
| 68. Clasps, | 113. Vertically-adjustable. |
| 69. Moldings, | Sash-balances— |
| 70. Strips, | 114. Friction, |
| 71. Tack-fasteners. | 115. Spring— |
| 4. Casters— | 148. Drum and cord, |
| 73. Antifriction-rollers, | 149. Friction-roller, |
| loose, | 150. Gear and rack, |
| 72. Antifriction-rollers, piv- | 116. Weight. |
| oted, | 16. Sash-cord fasteners— |
| 45. Ball— | 125. Weight. |
| 151. Antifriction-rollers, | 17. Sash-cord guides. |
| 152. Pivoted, | 18. Sash-fasteners— |
| 76. Pintle-retainers, | 117. Gear and rack, |
| 21. Sewing-machine, | 53. Lifts, |
| 74. Spring, | 51. Mid-rail, |
| 75. Wheels. | 52. Right-angle, |
| 6. Door-checks— | 118. Rod-clamps, |
| 77. Buffers, | 119. Sliding bolts. |
| 80. Catches and buffers, | 19. Sash-holders— |
| 79. Catches, floor, | 121. Clamps, |
| 78. Catches, wall, | 120. Combined fasteners, |
| 81. Chain or link, | 122. Foot, |
| 83. Foot-bolt, | 54. Roller-bearing, |
| 82. Foot-lever, | 123. Strips, |
| 84. Sliding-bolt, | 124. Wedges. |
| 85. Trippers, | 26. Sash-weights. |
| 86. Weights, | 22. Shutter bowers— |
| 46. Door checks and closers— | 23. Fasteners— |
| 88. Liquid, | 126. Bars or bolts, |
| 87. Pneumatic, | 128. Catches, double— |
| 47. Closers. Gravitating | 131. Gravity, |
| 7. Hangers— | 130. Rod, |
| 89. Brackets, | 127. Single, |
| 90. Roller-carriage— | 149. Sliding, |
| 91. Ball-bearing, | 129. Wall, |
| 92. Sliding, | 55. Combined sash, |
| 93. Stay-rollers, | 56. Fire, |
| 8. Securers— | 132. Hooks, |
| 154. Braces, | 133. Operators, |
| 9. Springs— | 24. Workers— |
| 94. Bow, | 57. Combined slat, |
| 95. India-rubber, | 134. Cord or chain, |
| 96. Lever attachments, | 135. Levers, |
| 98. Sliding-door, | 136. Rotary-shaft, |
| 97. Strap and pulley attach- | 137. Sliding-shaft, |
| ments, | 138. Sliding-shutter. |
| 99. Torsional— | 26. Stair-rods and securers— |
| 100. Coiled, | 139. Buttons, |
| 101. Flat, | 140. Fasteners, |
| 102. Volute, | 141. Rods. |
| 10. Handles— | 37. Tilt-alarms. |
| 103. Coffin— | 28. Traneom lifters— |
| 153. Braces, | 142. Pivots. |
| 11. Hinges— | 29. Window-bead fasteners. |
| 48. Awning-blind, | 30. Window and door buttons— |
| 104. Box, | 58. Automatic, |
| 5. Coach, | 143. Sliding bolts, |
| 105. Concealed, | 144. Screw, |
| 106. Door— | 59. Strips, |
| 107. Butt, | 145. Trippers, |
| 108. Strap, | 146. Vertically-swinging. |

CLASS 32.—DENTISTRY. (XX.)

Sub-classes.

- | | |
|------------------------|-----------------------------|
| 1. Articulators. | 7. Operative. |
| 12. Bridge-work. | 8. Pluggers— |
| 13. Disks and holders. | 18. Air, |
| 14. Engines— | 24. Angle attachments, |
| 21. Bracket-supports, | 25. Hand-operated, |
| 23. Friction-gear, | 26. Power-operated. |
| 22. Standard-supports. | 19. Regulators and spacers. |
| 3. Foil-condensers. | 20. Rubber-dam clamps. |
| 15. Handpieces— | 33. Saliva-ejectors. |
| 11. Angle attachments. | 9. Teeth— |
| 16. Jaw-braces. | 32. Filling, |
| 17. Matrices. | 29. Metal-crown, |
| 4. Mechanical. | 30. Porcelain-crown. |
| 5. Miscellaneous. | 10. Tools— |
| 6. Molds. | 31. Burrs, |
| 27. Mouth-mirrors. | 34. Forceps. |
| 28. Obtundors. | |

CLASS 70.—LOCKS AND LATCHES. (XX.)

Sub-classes.

- | | |
|-----------------------------|------------------------------|
| 3. Box-fasteners— | Locks— |
| 80. Seal, | 75. Pivoted-tumbler, |
| 81. Sliding-bolt, | 23. Seal, |
| 82. Spring-catch, | 95. Seals— |
| 83. Hasp-fasteners. | 31. Sliding-door, |
| 7. Key-fasteners— | 76. Sliding-tumbler, |
| 65. Portable. | 79. Systems of locks, |
| 8. Keyhole-guards— | 25. Tilt, |
| 61. Sliding and pivoted. | 26. Time, |
| 9. Keys. | 27. Trunk— |
| 10. Knobs. | 115. Swinging-hasp, |
| 11. Knob attachments— | 77. Tumbler and dog, |
| 84. Key-fastener, | 78. Without tumblers. |
| 85. Screw-spindle, | 15. Lock-strikes— |
| 86. Set-screw and pin fas- | 52. Electric. |
| tenor, | 16. Lock-trimmings. |
| 87. Spring-fastener, | 29. Locks and latches com- |
| 88. Wedge-fastener. | hined. |
| 12. Knob-roses. | 17. Padlocks— |
| 41. Knob-spindle fasteners. | 109. Alarm, |
| 13. Latches— | 104. Divided-shackle, |
| 64. Automatic-detent, | 110. Indicator— |
| 28. Gate, | 111. Pivoted-shackle, |
| 51. Gravity, | 19. Permutation— |
| 44. Lifting— | 112. Pivoted-shackle, |
| 45. Hooked-end, | 113. Sliding-shackle, |
| 43. Pivoted-end, | 96. Pin, |
| 21. Reversible, | 105. Pivoted-shackle— |
| 42. Sliding, | 106. Sliding-bolt, |
| 49. Swinging. | 107. Rotating-shackle, |
| 14. Locks— | 97. Seal, |
| 1. Alarm— | 108. Sliding-shackle. |
| 89. Detonating, | 18. Permutation— |
| 2. Bag, | 56. Dials, |
| 90. Bicycle, | 55. Hasp, |
| 4. Car-seat, | 66. Keyhole-guards, |
| 46. Cylinder, | 58. Knob-pins, |
| 91. Cylinder knob— | 57. Operating-handle, |
| 92. Multiple-key, | 54. Push-pin, |
| 50. Electric— | 53. Rotating tumblers, |
| 63. Combination, | 60. Sliding tumblers, |
| 62. Time, | 59. Spindles, |
| 5. Hasp, | 67. Tilt-locks, |
| 6. Indicator, | 94. Seal-bolts. |
| 74. Multiple-bolt, | 98. Seals— |
| 69. Multiple-key— | 99. Automatic-catch, |
| 70. Adjustable tumbler, | 100. Box and bag, |
| 71. Master-key, | 101. Box-strap. |
| 73. Trap, | 102. Shackles. |
| 20. Piano, | 104. Sliding-door fasteners. |
| 47. Pin— | 103. Trunk-fasteners. |
| 93. Multiple-key, | |

DIVISION XX.—CONTINUED.

CLASS 100.—SAFES. (XX.)

Sub-classes.

- | | |
|-------------------------|---|
| 1. Burglar-proof. | 3. Safe bolt-work— |
| 4. Circular-door. | 9. Automatic, |
| 5. Express. | 10. Filling. <small>HO . . . 11</small> |
| 2. Fireproof. | 7. Safety-deposit. |
| 6. Gas and explosives. | 12. Safety-deposit boxes. |
| 11. Pressure mechanism. | 8. Water and air. |

CLASS 27.—UNDERTAKING. (XX.)

Sub-classes.

- | | |
|--------------------------|----------------------------|
| 1. Biers. | Coffins— |
| 2. Burial apparatus— | 15. Life-signals, |
| 5. Grave-fillers, | 16. Linings and coverings, |
| 6. Raising and lowering. | 7. Metallic, |
| 3. Coffins— | 8. Plastic material, |
| 10. Brackets, | 17. Shields, |
| 11. Corners, | 9. Wooden. |
| 12. Fasteners, | 4. Embalming— |
| 13. Head-rests, | 18. Apparatus, |
| 14. Lids, | 19. Processes. |

DIVISION XXI.

EXAMINER HAINS.

CLASSES.—13, Brakes and Gins; 19, Carding; 26, Cloth-Finishing; 28, Cordage; 38, Felt and Fur; 66, Knitting and Netting; 117, Silk; 118, Spinning; 139, Weaving.

CLASS 13.—BRAKES AND GINS. (XXI.)

Sub-classes.

- | | |
|----------------------------|----------------------------|
| 10. Delinting cotton-seed. | 3. Hair pickers. |
| 1. Gin attachments. | 4. Oakum machines. |
| 11. Gin brushes. | 5. Processes. |
| 17. Gin condensers. | 6. Reciprocating brakes. |
| 12. Gin feeders— | 7. Roller-gins. |
| 19. Pneumatic. | Rotary brakes— |
| 13. Gin ribs. | 16. Breakers and crushers, |
| 20. Gin rollers. | 17. Rotary brakes, |
| 14. Gin saws. | 18. Scutchers. |
| 15. Gin saw cleaners. | 9. Saw gins. |
| 2. Hackling machines. | |

CLASS 19.—CARDING. (XXI.)

Sub-classes.

- | | |
|-------------------------------------|-------------------------------|
| 16. Balling heads. | 14. Fleece removers. |
| 1. Burring. | 8. Lapping. |
| 2. Card clothing. | 19. Opener beaters. |
| 3. Carding. | 20. Opener evening mechanism. |
| 5. Coilers. | 9. Pickers. |
| 17. Comb dabbing mechanism. | 21. Screens. |
| 6. Combing— | 25. Stopping. |
| 24. Circle combs. | 15. Stripping mechanism. |
| 12. Covering yarn. | 23. Traveling flat cards. |
| 22. Cylinders and rollers. | 10. Wadding. |
| 18. Dust trunks. | 11. Wool oiling. |
| 7. Feeding cards. | |
| 13. Fleece dividers and condensers. | |

CLASS 26.—CLOTH-FINISHING. (XXI.)

Sub-classes.

- | | |
|-------------------------------------|----------------------------|
| 10. Beetling. | 5. Pressing. |
| 11. Calendering. | 13. Rigging. |
| 9. Cutting lace and looped fabrics. | 6. Shearing. |
| 2. Finishing. | 14. Singeing. |
| 12. Finishing cut pile fabrics. | 15. Sizing. |
| 3. Folding. | 7. Sponging. |
| 18. Girding. | 8. Stretching. |
| 4. Napping. | 16. Stretching and drying. |
| | 17. Winding. |

CLASS 28.—CORDAGE. (XXI.)

Sub-classes.

- | | |
|--------------------------------|---------------------------------------|
| 23. Balls. | 12. Spools. |
| 2. Banding. | 13. Tassels. |
| 3. Bobbin supporters. | 14. Warping. |
| 4. Braiding. | 30. Warping reeds. |
| 24. Braiding carriers. | 31. Warping stop motions. |
| 25. Braids. | 32. Winding balls. |
| 21. Cord and rope machines. | Winding bobbins— |
| 5. Cords and ropes. | 17. Sewing machine shuttle, |
| 6. Covering cord. | 15. Warp wind. |
| 7. Finishing yarn and thread. | 16. Weft wind. |
| 27. Fuse and packing machines. | 22. Winding heddle and seine-needles. |
| 29. Lease formers. | 18. Winding spools. |
| 9. Packaging braid and yarn. | 19. Winding tatting shuttles. |
| 10. Reels. | 20. Yarn guides and clearers. |
| 11. Separating rope. | |

CLASS 38.—FELT AND FUR. (XXI.)

Sub-classes.

- | | |
|----------------------|---------------------|
| 7. Fabrics. | 10. Forming bats. |
| 8. Felting machines. | 11. Fulling. |
| 9. Flock cutting. | 12. Furs and pelts. |

CLASS 66.—KNITTING AND NETTING. (XXI.)

Sub-classes.

- | | |
|-----------------------------------|-----------------------------------|
| 1. Burrs and sinkers. | 6. Netting. |
| Circular— | 7. Stopping. |
| 2. Circular machines, | Straight— |
| 18. Independent needles, | 15. Cams and stops, |
| 11. Looper pin and hook machines. | 13. Fashioning-machines, |
| 17. Crocheting. | 14. Looper pin and hook machines, |
| 3. Darning. | 8. Straight machines, |
| 4. Fabrics. | 16. Warp-machines. |
| 12. Feeding. | 9. Take-ups and tensions. |
| 5. Needles. | 10. Tatting. |

CLASS 117.—SILK. (XXI.)

Sub-classes.

- | | |
|---------------|----------------|
| 1. Assorting. | 5. Silk. |
| 2. Cleaning. | 6. Stretching. |
| 3. Cocoones. | 7. Throwing. |
| 4. Doubling. | 8. Winding. |

CLASS 118.—SPINNING. (XXI.)

Sub-classes.

- | | |
|-----------------------------|---------------------------------|
| 1. Bobbin and cop builders. | 11. Rings and travelers. |
| 2. Bobbins. | 27. Spindles and appurtenances. |
| 26. Clearers. | Spindles and bearings— |
| 4. Cop tubes. | 18. Bolsters, |
| 30. Covering yarn. | 19. Combined bearings, |
| 5. Domestic. | Sleeve whirles and standards, |
| 6. Doubling. | 25. Spindles and bearings, |
| 7. Drawing and evening. | 21. Steps. |
| 23. Drawing rollers. | 24. Spindle driving devices. |
| 27. Drawing stop mechanism. | 12. Stopping. |
| 28. Drawing trumpets. | 22. Top roll saddles. |
| 29. Fliers. | 13. Throstles and caps. |
| 8. Hemp, flax, and hair. | 14. Twisting-heads. |
| 9. Mules and jacks. | 16. Yarn controllers. |
| 10. Ring frames. | |

CLASS 139.—WEAVING (XXI.)

Sub-classes.

- | | |
|----------------------------------|----------------------------|
| 47. Bag-turning machines. | Looms— |
| 5. Carpet-rag loopers. | 68. Swivel, |
| 6. Chenille. | 39. Wire. |
| 40. Chenille-machines. | 42. Pattern-chains. |
| 8. Cross-weaving. | 22. Picker-checks. |
| 50. Cutting double pile fabrics. | 21. Pickers. |
| 67. Driving and lay motions. | 24. Reeds and reed-making. |
| Fabrics— | 25. Shedding. |
| 70. Elastic. | Shuttles— |
| 9. Fabrics, | 44. Cop-cell and cover, |
| 71. Pile, | 45. Float-detecting, |
| 72. Tubular. | 46. Guides and tensions, |
| 41. Fringe-machines. | 27. Shuttles. |
| 10. Fringes. | 28. Shuttle-boxes. |
| 13. Heddle-machines. | 29. Shuttle-checks. |
| 14. Heddles. | 30. Shuttle-guards. |
| 16. Jacquard mechanism. | Shuttle-motions— |
| Looms— | 48. Fly, |
| 1. Bag, | 49. Positive, |
| 2. Basket, | 69. Pneumatic. |
| 3. Buttonhole, | 43. Shuttle-threaders. |
| 7. Circular, | 33. Special machines. |
| 11. Hair-cloth, | Stopping— |
| 12. Hand, | 51. Protector mechanism, |
| 15. Irregular, | 52. Stopping, |
| 17. Lappet, | 53. Warp-stop motions, |
| 18. Looms, | 54. Weft-stop motions. |
| 19. Narrow-ware, | Take-ups and let-offs— |
| 20. Needle, | 56. Beams, |
| Pile-fabric— | 57. Escapement let-offs, |
| 62. Longitudinal wires, | 58. Friction let-offs, |
| 23. Pile fabric, | 59. Let-offs, |
| 63. Pile-wires, | 60. Take-ups, |
| 64. Pile-wire motions, | 61. Take-ups and let-offs. |
| 65. Terry, | 36. Temples. |
| 66. Tufted, | 37. Tying-in warps. |
| 32. Slat, cane, and straw, | 38. Weft-forks. |

DIVISION XXII.

EXAMINER SEATON.

CLASSES.—9, Boats; 42, Firearms; 43, Fishing and Trapping; 115, Marine Propulsion; 89, Ordnance; 102, Projectiles; 114, Ships; 116, Signals.

CLASS 9.—BOATS. (XXII.)

Sub-classes.

- | | |
|---------------------------------------|---------------------------|
| 2. Building. | 6. Life-preservers. |
| 3. Buoys and safes. | 7. Oars and oar-locks. |
| 4. Detaching, hoisting, and lowering. | 8. Rafting and booming. |
| 5. Life boats and rafts. | 9. Sectional and folding. |
| | 10. Swimming appliances. |

CLASS 42.—FIREARMS. (XXII.)

Sub-classes.

- | | |
|--|--|
| 25. Ball-traps. | Guns— |
| 3. Bayonets. | Magazine— |
| 5. Bows and cross-bows. | C. Barrel tilting up at muzzle. |
| 8. Catapults. | D. Barrel hinged to stock. |
| 28. Cartridge-holders. Temporary. | E. Barrel swinging laterally on vertical pin. |
| 26. Electrical appliances. | F. Barrel rotating on parallel pin. |
| Guns— | G. Longitudinally-reciprocating breech-bolt, (spring-impelled firing-pin.) |
| 1. Air and spring. | II. Same, with firing-pin impelled by rotating banner. |
| 4. Blow. | I. Breech-block swinging upward and forward. |
| Breech-loading— | J. Breech-block swinging laterally forward. |
| A. Barrel sliding forward. | K. Breech-block swinging backward and downward. |
| B. Barrel tilting up at breech. | L. Breech-block swinging on center or trunnions. |
| C. Barrel tilting up at muzzle. | M. Breech-block swinging upward and backward. |
| D. Barrel hinged to stock. | N. Breech-block swinging laterally backward. |
| E. Barrel swinging laterally on vertical pin. | O. Breech-block swinging backward and downward. |
| F. Barrel rotating on parallel pin. | P. Breech-block swinging on center or trunnions. |
| H. Breech-block drawn back by hand or lever, (bolt-gun.) | Q. Breech-block swinging upward and backward. |
| I. Breech-block swinging upward and forward. | R. Breech-block sliding vertically in mortise. |
| J. Breech-block swinging laterally forward. | S. Breech-block sliding laterally in mortise. |
| K. Breech-block swinging backward and downward. | T. Rotating carrier, filled from a fixed magazine and discharged in the carrier. |
| L. Breech-block swinging on center or trunnions. | 9. Gun-barrels. |
| M. Breech-block swinging upward and backward. | 10. Gun-trimmings. |
| N. Breech-block swinging laterally backward. | 11. Implements. |
| O. Breech-block swinging downward and backward. | 12. Locks. |
| P. Breech-block swinging on longitudinal pin or hinge. | 27. Muzzle-loaders. |
| Q. Breech-block sliding vertically in mortise. | 15. Nipples and guards. |
| R. Breech-block sliding laterally in mortise. | 16. Pistol-swords. |
| S. Faucet breech-block, chambered. | 18. Revolvers— |
| T. Faucet breech-block with chamber in front. | 29. Locks. |
| U. Rotating sleeve on barrel. | 19. Rifling. |
| V. Gas-operated. | 20. Sights. |
| W. Recoil-operated. | 21. Stocks. |
| 7. Cane. | 22. Targets— |
| Magazine— | 24. Flying. |
| A. Barrel sliding forward. | 23. Toy pistols. |
| B. Barrel tilting up at breech. | |

CLASS 43.—FISHING AND TRAPPING. (XXII.)

Sub-classes.

- | | |
|-----------------------------|----------------------------|
| 2. Decoys. | Insect-destroyers— |
| Fishing— | 5. Fumigators. |
| 3. Fishways. | 8. Moth-extermiators. |
| 4. Floats. | 14. Powder-dusters. |
| 6. Harpoons and spears. | Traps— |
| 7. Hooks. | 18. Redbug. |
| 9. Nets and seines. | 19. Cage. |
| 10. Oyster-culture. | 20. Fish. |
| 11. Oyster-dredges. | 21. Impalement. |
| 12. Oyster rakes and tongs. | 22. Insect. |
| 13. Pisciculture. | 23. Jaw. |
| 15. Reels. | 24. Self-set and ever-set. |
| 16. Rods. | 25. Sporting. |
| 17. Sinkers. | 26. Victim-set. |
| Insect-destroyers— | 27. Wire-choker. |
| 1. Catchers. | |

CLASS 115.—MARINE PROPULSION. (XXII.)

Sub-classes.

- | | |
|-----------------------------|--|
| Paddle-wheels— | Propelling— |
| 4. Feathering-blades. | 12. Reciprocating propellers. |
| 22. Fitting and driving. | 10. Steering-propellers, (except screw.) |
| 23. Form and construction. | Screw-propellers— |
| Propelling— | 15. Fitting and driving. |
| 1. Buoyant propellers. | 16. Form and construction. |
| 2. Chain-propellers. | 17. Steering. |
| 3. Crank-paddles. | Towing— |
| 6. Hydraulic propellers. | 18. External power. |
| 21. Motion of vessel. | 19. Internal power. |
| 24. Oscillating propellers. | 13. Wheels in channel. |
| 8. Pneumatic propellers. | |

CLASS 89.—ORDNANCE. (XXII.)

Sub-classes.

- | | |
|----------------------------|--------------------------|
| 26. Body-structure. | 9. Machine-guns. |
| 1. Breech-loading— | 10. Mortars. |
| 25. Gas-operated. | 12. Operating. |
| 24. Recoil-operated. | 22. Pneumatic. |
| 2. Carriages. | 29. Practice-barrels. |
| 19. Cartridge-feed cases. | 13. Shields. |
| 3. Counterpoise-carriages. | 28. Sights. |
| 4. Disabling. | 15. Submarine guns. |
| 21. Electrical appliances. | 16. Tompions and valves. |
| 27. Gas-checks. | 17. Trunnions. |
| 7. Loading. | 18. Vents and stoppers. |
| 20. Locks. | |

DIVISION XXII.—CONTINUED.

CLASS 102.—PROJECTILES. (XXII.)

Sub-classes.

- | | |
|---------------------------|-------------------------|
| 21. Blasting-cartridges. | 7. Flasks and chargers. |
| 22. Blasting-fuses. | 8. Lubricating. |
| 23. Blasting implements. | 9. Marine torpedoes. |
| 2. Bomb-lances. | 11. Primers. |
| 3. Cap-boxes. | 12. Projectiles. |
| 4. Cap-filling. | 13. Rockets. |
| 19. Cartridge implements. | 14. Sabots and wads. |
| 5. Cartridge-loading. | 15. Shells. |
| 6. Cartridges— | 16. Shell-fuses. |
| 20. Electric. | 18. Torpedoes. |

CLASS 114.—SHIPS. (XXII.)

Sub-classes.

- | | |
|-----------------------------------|--------------------------------|
| 1. Anchors. | 30. Light and air ports. |
| 2. Anchor-trippers. | 32. Masts and spars. |
| 3. Armor-clad. | 46. Oil-distributers. |
| 4. Ballasting. | 33. Raising sunken vessels. |
| 5. Berths, cabins, and furniture. | 34. Reefing and furling sails. |
| 6. Bilge-water. Discharging | 35. Sails and rigging. |
| 9. Building. | 36. Scows. |
| 10. Cables and cable-stoppers. | 37. Scuppers and hawse-holes. |
| 51. Camels and floating docks. | 38. Steamboat-chimneys. |
| 14. Centerboards and keels. | 39. Steering mechanism— |
| 15. Cleats and belaying-pins. | 47. Hydraulic, |
| 16. Couplings and tow-lines. | 48. Pneumatic, |
| 18. Decks and hatchways. | 50. Rudders, |
| 52. Fenders and torpedo-guards. | 49. Wheels and channels. |
| 19. Fire-extinguishers. | 40. Submarine and torpedo. |
| 22. Form. | 41. Surge-relievers. |
| 23. Gangways and bridges. | 42. Travelers. |
| 24. Hanks, cringles, and hoops. | 43. Turrets. |
| 26. Ice boats and breakers. | 44. Valve and port stoppers. |
| 27. Implements. | 45. Ventilating. |
| 29. Leak-stoppers. | |

CLASS 116.—SIGNALS. (XXII.)

Sub-classes.

- | | |
|--------------------|-------------------------|
| 1. Alarms— | 12. Flag-staff holders. |
| Burglar— | 31. Indicators— |
| 41. Combined, | 45. Barbers' turns, |
| 42. Detonating, | 51. Game-counters, |
| 43. Miscellaneous, | 46. Identity, |
| 44. Ringing, | 47. Office, |
| 11. Fire, | 48. Peg, |
| 15. Leak, | 49. Rotary, |
| 23. Shoal. | 50. Sliding, |
| 32. Annunciators. | 52. Station. |
| 33. Bells— | 22. Semaphores. |
| 34. Call, | Signals— |
| 35. Door, | 9. Car, |
| 36. Letter-box, | 13. Fog, |
| 37. Sleigh. | 18. Nautical, |
| 38. Bell-hanging— | 19. Pneumatic, |
| 39. Pulls, | 20. Pyrotechnic. |
| 40. Ringing. | 26. Speaking-tubes. |

DIVISION XXIII.

EXAMINER A. P. GREELEY.

CLASSES.—181, Acoustics; 33, Drafting; 58, Horology; 73, Measuring-Instruments.

CLASS 181.—ACOUSTICS. (XXIII.)

Sub-classes.

- | | |
|------------------|---------------------------|
| 1. Audiphones. | 6. Graphophone-tablets. |
| 2. Ear-trumpets. | 3. Mechanical telephones. |
| 4. Graphophones. | 5. Miscellaneous. |

CLASS 33.—DRAFTING. (XXIII.)

Sub-classes.

- | | |
|---------------------------|-------------------|
| 13. Beam-compasses. | 8. Plotters. |
| 1. Calipers and dividers. | 12. Protractors. |
| 2. Curve-scribers. | 9. Scribers. |
| 5. Ellipsographs. | 10. Stair-curves. |
| 6. Pantographs. | 14. T-squares. |
| 7. Parallel-rulers. | |

CLASS 58.—HOROLOGY. (XXIII.)

Sub-classes.

- | | |
|---------------------------|-------------------------|
| 8. Balance-escapements. | 15. Time-alarms. |
| 3. Clocks— | 16. Time-checks. |
| 2. Calendar, | 31. Time lamp-lighters. |
| 23. Electric, | 33. Time-signals. |
| 9. Geographical, | 17. Watches. |
| 29. Pneumatic. | 18. Watch-balances— |
| 4. Clock-cases. | 19. Barrels, |
| 5. Clock-striking. | 20. Cases, |
| 6. Clock-winding. | 21. Case-springs, |
| 34. Dials and hands. | 22. Dust-caps, |
| 10. Metronomes. | 23. Keys, |
| 11. Pendulums. | 24. Plates, |
| 35. Pendulum-escapements. | 25. Regulators, |
| 30. Repeaters. | 26. Stops. |
| 12. Safety-wheels. | 32. Watchmakers' tools. |
| 13. Stem-winders. | 27. Watch-winding. |
| 14. Sun-dials. | |

CLASS 73.—MEASURING-INSTRUMENTS. (XXIII.)

Sub-classes.

- | | |
|------------------------------|----------------------------------|
| 2. Anemometers. | Meters— |
| 3. Balances— | 68. Proportional, |
| 101. Electrical attachments, | 37. Rotary, |
| 99. Equal arms, | 45. Spirit. |
| 102. Pick-up weights, | 27. Odometers. |
| 100. Recording. | 80. Pitch-boards. |
| 4. Barometers. | 81. Planimeters. |
| 5. Bathometers. | 72. Plumb-bobs. |
| 6. Bevels. | 31. Pressure-gages— |
| 7. Calculators— | 109. Bourdon, |
| 84. Tabular. | 110. Diaphragm, |
| Calipers— | 111. Piston. |
| 105. Dial. | 33. Rain-gages. |
| 106. Stem. | 34. Recorders— |
| 86. Cash-registers— | 89. Fare, |
| 87. Rotating indicators. | 88. Manual, |
| 9. Cloth-measuring machines. | 90. Passenger, |
| 10. Coin-counters. | 91. Pressure, |
| 83. Coin-packages. | 92. Speed, |
| 11. Coin-testers. | 93. Steam-engine indicator. |
| 73. Conformators. | 123. Registering ballot-boxes. |
| 13. Dividing-engines. | 35. Registers— |
| 15. Dynamometers. | 59. Fare, |
| 16. Gages— | 17. Game, |
| 107. Depth, | 58. Passenger. |
| 77. Micrometer, | Scales— |
| 66. Surface, | 39. Beams, |
| 108. Thickness, | 8. Cart, |
| 67. Track. | 23. Hydrostatic, |
| 19. Grain-meters— | 41. Pans, |
| 97. Double-trap bottom, | 29. Pendulum, |
| 94. Oscillating, | 121. Platform, |
| 96. Positively-actuated, | 104. Price, |
| 78. Rotating, | 38. Sack, |
| 95. Twin buckets. | 46. Spring. |
| 20. Grain-tallies. | 69. Ships' logs. |
| 22. Hydrometers. | 113. Spacing-instruments. |
| 24. Hygrosopes. | 42. Specific-gravity apparatus. |
| 79. Lactometers. | 44. Sphygmoscopes. |
| 63. Leather-measuring. | 112. Spirometers. |
| Levels— | 47. Squares— |
| 71. Plumb, | 115. Center, |
| 70. Spirit. | 116. Folding. |
| Measures— | 103. Steelyards. |
| 36. Rotary, | 117. Telemetry. |
| 40. Scale, | 50. Testing illuminating-fluids. |
| 64. Shoemakers', | 51. Testing-machines. |
| 43. Speed, | 52. Thermometers— |
| 48. Tailors', | 118. Metallic, |
| 49. Tape. | 119. Oven, |
| 60. Measuring-faucets. | 32. Pyrometers, |
| 61. Measuring-pumps. | 85. Telethermometers. |
| 62. Measuring-vessels. | 21. Tollers. |
| Meters— | 120. Ullage-rods. |
| 1. Air and gas, | 53. Voting-machines. |
| 12. Diaphragm, | 54. Water-gages— |
| 98. Disk, | 82. Float. |
| 28. Oscillating, | 55. Weather-vanes. |
| 30. Piston, | 56. Weights. |

DIVISION XXIV.

EXAMINER PIERCE.

CLASSES.—2, Apparel; 29, Crinoline and Corsets; 112, Sewing-Machines; 132, Toilet; 135, Umbrellas and Canes; 165, DESIGNS.

CLASS 2.—APPAREL. (XXIV.)

Sub-classes.

- | | |
|----------------------------------|---------------------------------|
| 34. Armpit-shields. | 33. Hat-ventilators. |
| 30. Bonnets. | 38. Muffs and mufflers. |
| 1. Capes and shawls. | 11. Neckties. |
| 53. Coat-bangers. | 28. Needles. |
| 2. Coats and vests. | 39. Needle-threaders. |
| 3. Collars and cuffs. | 40. Nether garments. |
| 35. Combination garments. | 13. Pin and needle cases. |
| 46. Curling hat-brims. | 14. Pinking. |
| 4. Cutting. | 16. Plaiting. |
| 36. Darning-lasts. | 15. Pockets. |
| 5. Diapers. | 18. Sewing. |
| 6. Embroidery-patterns. | 41. Shirts. |
| 37. Garment-protectors. | 20. Skirt-elevators. |
| 8. Garters and belts. | 42. Skirts. |
| 9. Gloves. | 23. Stockings. |
| 10. Handkerchiefs. | 22. Stretchers and formers. |
| 47. Hat-blocking and stretching. | 43. Supplemental bosoms. |
| 48. Hat-blocks. | 25. Tailoring. |
| 49. Hat brushing and finishing. | 29. Thimbles. |
| 50. Hat-ironing. | 44. Thread holders and cutters. |
| 51. Hat-pouncing. | 26. Trimmings. |
| 52. Hat-pressing. | 27. Work-boxes. |
| 31. Hats and caps. | 45. Work-holders. |
| 32. Hat-sweats. | |

CLASS 29.—CRINOLINE AND CORSETS. (XXIV.)

Sub-classes.

- | | |
|----------------------|----------------------|
| 1. Bustles. | 10. Shoulder-braces. |
| 3. Corsets. | 7. Skirt-machines. |
| 4. Hoops and clasps. | 9. Stays. |
| 5. Hoop-skirts. | 8. Underwaists. |
| 6. Pads. | |

CLASS 112.—SEWING-MACHINES. (XXIV.)

Sub-classes.

- | | |
|-------------------------------|--------------------------------|
| 35. Attachment-holders. | 17. Running-stitch. |
| 1. Binders. | 18. Setters and threaders. |
| 41. Book-sewing. | 31. Sewing hats. |
| 3. Braiders and corders. | 19. Sewing looped fabrics. |
| 43. Broom-sewing. | 32. Sewing on buttons. |
| 4. Buttonhole. | 42. Sewing rugs. |
| 5. Chain and double chain. | 20. Sewing shoes. |
| 7. Embroidering. | 21. Short-thread. |
| 8. Feeding. | 22. Shuttle-machines. |
| 36. Glove-sewing machines. | 23. Shuttles and bobbins. |
| 9. Guides. | 24. Special machines. |
| 10. Hemmers. | 25. Straw. |
| 34. Methods. | 26. Take-ups. |
| 29. Miscellaneous parts. | 39. Tensions. |
| 11. Needles. | 33. Thread-cutters. |
| 37. Needle-clamps. | 6. Trimmers. |
| 13. Presser-feet and lifters. | 27. Tuck creasers and markers. |
| 14. Quilting. | 12. Tucking-guides. |
| 38. Revolving hooks. | 40. Turning fabrics. |
| 15. Revolving-hook machines. | 28. Wax-thread. |
| 16. Rufflers and gatherers. | |

CLASS 132.—TOILET. (XXIV.)

Sub-classes.

- | | |
|--------------------------|---------------------------|
| 3. Combs. | 9. Nail and ear cleaners. |
| 4. Crimping and curling. | 14. Pins. |
| 5. Hair-pins. | 15. Shaving-cups. |
| 6. Hair and wigs. | 11. Toilet-cases. |
| 8. Mustache-guards. | 12. Toothpicks. |

CLASS 135.—UMBRELLAS AND CANES. (XXIV.)

Sub-classes.

- | | |
|--------------------------------|-------------------------------|
| 2. Canes. | 9. Runners and notches. |
| 3. Combined cane and umbrella. | 10. Tip-cups. |
| 4. Covers. | 13. Umbrellas, Folding— |
| 5. Drip cups. | 14. Self opening and closing, |
| 7. Handles and sticks. | 12. Supporters. |
| 8. Ribs and stretchers. | |

CLASS 165.—DESIGNS. (XXIV.)

The sub-classes conform as nearly as possible to those of the mechanical classes.

DIVISION XXV.

EXAMINER WYNNE.

CLASSES.—166, Artesian and Oil Wells; 17, Butchering; 83, Mills; 125, Stone-Working; 130, Thrashing; 146, Vegetable Cutters and Crushers.

CLASS 166.—ARTESIAN AND OIL WELLS. (XXV.)

Sub-classes.

- | | |
|-------------------------|------------------------|
| 1. Casing-heads. | Earth-angers— |
| 2. Cleaning. | 13. With carriers. |
| 3. Drilling and boring. | 6. Reamers. |
| 4. Drill-jars. | 10. Sucker-rods. |
| 5. Drill-rod grabs. | 7. Tube-clamps. |
| 11. Earth augers— | 8. Tubing and packing. |
| 12. Bits, | 9. Walking-beams. |

CLASS 17.—BUTCHERING. (XXV.)

Sub-classes.

- | | |
|-----------------------------|----------------------------------|
| 8. Butchers' stalls. | Meat-cutters— |
| 9. Chopping-blocks. | 22. Hand, |
| Dressing— | 23. Rocking-knife, |
| 10. Fish-dressing machines, | 24. Slicers, |
| 11. Hog-scraping machines, | 25. Trip mechanism. |
| 12. Intestine-cleaners, | 26. Meat-mixers. |
| 13. Skinning. | Meat-tenderers— |
| 14. Meat clamps. | 27. Hand, |
| Meat-cutters— | 28. Pivoted-head, |
| 16. Cracklings, | 29. Rotary. |
| 17. Crank mechanism, | 6. Sausage-machines. |
| 18. Cube, | 7. Scalding and singeing. |
| 19. Cylinder and block, | 30. Slaughtering, elevating, and |
| 20. Cylinder and concave, | ensupending. |
| 21. Double-cylinder, | |

CLASS 83.—MILLS. (XXV.)

Sub-classes.

- | | |
|--------------------------------|------------------------------|
| Amalgamators— | Grinding-mills— |
| 65. Electric, | 13. Cone and shell, |
| 66. Lead, | 12. Crushing-rolls, |
| 67. Mercury, | 14. Cylinder and concave, |
| 68. Plate, | 7. Disk-action, Horizontal |
| 69. Vacuum, | 8. Disk-action, Vertical |
| 70. Vapor. | 44. Feed regulators, |
| Bagging grain— | 15. Grain-samplers, |
| 26. Bag-holders. | 16. Grist-alarms, |
| Chop-graders— | 23. Hominy, |
| 50. Bran-dusters, Beaters | 46. Impact pulverizers, |
| 51. Bran-dusters, Brushes | 6. Knife-action, |
| 49. Electric prithers, | 1. Mill-spindles, |
| 42. Flour processea, | 3. Millstone-dress, |
| 40. Gravity, | 4. Millstone-exhaust, |
| 39. Rotary bolts, | 2. Millstone-trams, |
| 38. Shaking bolts. | 22. Paint, |
| Dust-collectors— | 11. Rotary beaters. |
| 47. Reciprocating, | Ore and coal— |
| 48. Rotating. | 52. Coal-breakers, |
| Grain-scourers— | 53. Crushers, |
| 32. Centrifugal, | 63. Ice-crushers, |
| 36. Concave face, | 62. Ice picks and shavers, |
| 31. Conical, | Separators— |
| 30. Cylinder, Horizontal | 54. Dry, |
| 29. Cylinder, Vertical | 53. Jiggers, |
| 37. Disk-face, | 71. Magnetic, |
| 33. Peatle-action, | 59. Washers, |
| 35. Reciprocating and endless, | 56. Sifters and screens— |
| 34. Screw-action. | 60. Household, |
| Grinding-mills— | 57. Stamps. |
| 17. Balancing millstones, | Preparing grain— |
| 9. Ball and drum, | 28. Processea, |
| 21. Bark, | 27. Steaming and dampening. |
| 45. Chasing, | 64. Steam-boiler and flue |
| 18. Coffee, | scrapers. |
| 10. Compound movement, | 61. Sugar and salt crushers. |

CLASS 125.—STONE-WORKING. (XXV.)

Sub-classes.

- | | |
|----------------------------------|-----------------------------|
| 2. Channeling-machines. | 12. Millstone paint-staffs. |
| 3. Chucks for rock-drills. | 13. Millstone-picks. |
| 4. Diamond-tools. | 14. Mining-machines. |
| 5. Dressing slate. | 15. Monuments. |
| 6. Dressing stone. | 18. Sawing stone. |
| 10. Drills. | 19. Tools. |
| 11. Millstone-dressing machines. | |

CLASS 130.—THRASHING. (XXV.)

Sub-classes.

- | | |
|---------------------------------|------------------------------|
| 1. Band-cutters and feeders. | Grain-separators— |
| 31. Cane-strippers. | 16. Rotary screens, |
| 2. Clover-hullers. | 19. Screens and riddles, |
| 3. Corn-cribs. | 15. Shaking screens. |
| 4. Corn-husking implements. | 14. Granaries and bins. |
| 5. Corn-husking machines. | Straw-carriers— |
| Corn-shellers— | 21. Endless aprons, |
| 6. Breast and cylinder, | 22. Overhung rakes, |
| 7. Disk-action, | 23. Reels, |
| 9. Ear-grasping, | 24. Shaking tables, |
| 10. Implements, | 20. Stackers, |
| 8. Peripheral action. | 25. Vibrators, |
| 12. Fans and regulators. | 26. Walking-rakes. |
| 13. Flax-threshers. | Thrashing-machines— |
| 32. Fruit and vegetable separa- | 27. Cylinder-machines, |
| tors. | 29. Dust-conveyers, |
| Grain-separators— | 28. Flail-machines, |
| 17. Gravity, | 30. Vine and seed strippers. |
| 18. Oat, seed, and garlic, | |

CLASS 146.—VEGETABLE CUTTERS AND CRUSHERS.

(XXV.)

Sub classes.

- | | |
|----------------------------------|----------------------|
| 8. Apple-parers. | Straw-cutters— |
| 16. Bunching-machines. | 20. Double-cylinder, |
| Crushers and graters— | Pivoted-knife— |
| 15. Reciprocating, | 21. Rake-feed, |
| 9. Rotary. | 22. Roller-feed, |
| Cntters— | 23. Without feed, |
| 12. Bread, | Rotary-wheel— |
| 7. Reciprocating, | 24. Follower-feed, |
| 11. Rotary. | 25. Rake-feed, |
| 2. Fruit-squeezers. | 26. Roller-feed, |
| 3. Nut-crackers. | 27. Without feed, |
| 14. Peelers and washers. | Single-cylinder— |
| 6. Pitters, corers, and eye-cut- | 28. Rake-feed, |
| ters. | 29. Roller-feed, |
| 5. Seeders. | 30. Without feed, |
| Straw-cutters— | Sliding-knife— |
| Cutter and bed— | 31. Rake-feed, |
| 17. Reciprocating-knife, | 32. Roller-feed, |
| 18. Rotary-cylinder, | 33. Without feed. |
| 19. Cylinder and concave, | |

DIVISION XXVI.

EXAMINER GEO. D. SEELY.

CLASSES.—173, Electricity: Conductors; 191, Electricity: Electric Railways; 171, Electricity: Generation; 174, Electricity: Medical and Surgical; 172, Electricity: Motive-Power.

CLASS 173.—ELECTRICITY. CONDUCTORS. (XXVI.)

Sub-classes.

- | | |
|--------------------|-----------------------------|
| 13. Conductors— | 28. Insulators. |
| 94. Lead-covered, | 31. Lightning-rods. |
| 70. Underground. | 244. Machines for covering. |
| 14. Connectors. | 43. Rheostats. |
| 243. House-wiring. | |

CLASS 191.—ELECTRICITY. ELECTRIC RAILWAYS.

(XXVI.)

Sub-classes.

- | | |
|---------------------------------------|--------------------------------------|
| 17. Collapsible-tube conductor. | Sectional conductor, connected— |
| 1. Conductor supports and insulators. | 21. Mechanical closers, |
| 2. Electric locomotives— | 20. Traveling closers. |
| 25. Electric control, | 3. Systems— |
| 26. Electromechanical control, | 4. Battery, |
| 30. Motor on axle, | 8. Circuits. Series |
| 29. Pivoted motors, | 6. Closed-conduit, |
| 27. Single and multiple motor, | 5. Conduit, |
| 28. Spring-mounted motors, | 9. Converter, |
| 31. Traveling-dynamo. | 16. Distribution, |
| 15. General. | 11. Overhead— |
| 24. Motor part along the track. | 12. Trolleys. |
| 18. Sectional conductor, connected— | 22. Telfpher and towing. |
| 19. Magnetic closers, | 23. Trolley-operated track-switches. |

CLASS 171.—ELECTRICITY. GENERATION. (XXVI.)

Sub-classes.

- | | |
|----------------------------------|-------------------------------------|
| Batteries— | Magneto-electric— |
| 73. Thermal. | 212. Uniform field. |
| 23. Friction-generators. | 34. Meters. |
| 95. Galvanometers. | 125. Pyro-magneto-electric devices. |
| Inducturiums— | Regulators— |
| 122. Induction-coils, | 119. Alternating— |
| 123. Transformers. Rotary | 241. Compounding. |
| 124. Transformers. Stationary | 242. Inductive resistance. |
| Magneto-electric— | 221. Brush adjustment. |
| Armatures— | 222. Circuit-interruption. |
| 205. Disk. | 224. Compounding-machines. |
| 206. Drum, | 223. Compound-winding. |
| 207. Pole. | 225. Counter electromotive force. |
| 208. Ring. | 226. Engine-control. |
| 209. Bipolar. | 227. Magnetic reluctance. |
| 210. Brushes and holders. | 228. Reducing sparks. |
| 211. Commutators and collectors. | 229. Resistance. |
| 118. Connecting devices. | 230. Sectional winding. |
| 76. Hand-machines. | 97. Systems of distribution. |
| 211. Multipolar. | 231. Transmitting mechanism. |

CLASS 174.—ELECTRICITY. MEDICAL AND SURGICAL.

(XXVI.)

Sub-classes.

- | | |
|----------------------------|----------------------------|
| 87. Baths. | Medical and surgical— |
| 88. Body-wear. | 173. Combs and brushes, |
| 89. Electrodes. | 174. Electric soles, |
| 177. Medical and surgical— | 175. Exercising apparatus, |
| 172. Chairs and couches, | 170. Vaporizers. |

CLASS 172.—ELECTRICITY. MOTIVE-POWER. (XXVI.)

Sub-classes.

- | | |
|------------------------------|-----------------------------|
| 15. Dental instruments. | Motors— |
| 152. Elevators. | 126. Reciprocating. |
| 36. Motors— | 8. Steering and propulsion. |
| 120. Alternating— | Transmission of power— |
| 233. Condensers, | 237. Alternating— |
| 234. Distorted-field, | 239. Direct, |
| 235. Rotary-field, | 238. Phase-modification, |
| 236. Starters. | 240. Reciprocating. |
| 179. Hand-operating devices, | |

DIVISION XXVII.

EXAMINER GOULD.

CLASSES.—15, Brushing and Scrubbing; 51, Grinding and Polishing; 68, Laundry; 141, Washing Apparatus.

CLASS 15.—BRUSHING AND SCRUBBING. (XXVII.)

Sub-classes.

- | | |
|----------------------------------|--------------------------------------|
| 1. Blacking box and brush cases. | 8. Carpet-cleaners. |
| 18. Blacking-box holders. | 60. Carpet-sweepers. |
| 61. Boot-blackening machines. | Chimney-cleaners— |
| 2. Boot-cleaners. | 41. Flue and stovepipe, |
| 4. Broom-machines. | 42. Lamp. |
| Brooms— | 43. Combined mop heads and wringers. |
| 19. Broom-heads, | 44. Combined scrubbers and mops. |
| 20. Household, | 45. Dressing and assorting machines. |
| 21. Stable and yard, | Fountain-brushes— |
| 22. Whisk. | 46. Blacking, |
| 23. Brush and broom bridles— | 47. Broom, |
| 24. Handles, | 48. Hair, |
| 6. Supports. | 49. Paint, |
| 25. Brush-cleaners. | 51. Scrubbers, |
| Brush heads and faces— | 50. Shaving, |
| 26. Bath and flesh brushes, | 52. Tooth, |
| 27. Brush and broom fiber, | 53. Window-cleaners. |
| 28. Dusting-brushes, | Holders— |
| 29. Hair-brushes, | 54. Brush-head, |
| 30. Hat and clothes brushes, | 55. Convertible mop and brush, |
| 31. Horse-brushes, | 56. Mop-heads. |
| 32. Metal-cleaning brushes, | 57. Mops. |
| 33. Metallic tnft-fasteners, | 12. Mop-wringers. |
| 34. Molds and molded backs, | 14. Scrubbing-machines— |
| 35. Nail-brushes, | 15. Pails. |
| 36. Paint and whitewash brushes, | 58. Shoe-blackening stands. |
| 37. Rotary brushes, | 16. Shoe-brushes. |
| 13. Scrubbers, | 17. Street-sweepers. |
| 38. Shaving-brushes, | 59. Window-cleaners. |
| 39. Tooth-brushes. | |
| 7. Brush-machines. | |
| 40. Brush-trimming machines. | |

CLASS 68.—LAUNDRY. (XXVII.)

Sub-classes.

- | | |
|------------------------------|------------------------------------|
| 1. Bosom-boards. | 29. Washboards. |
| 2. Clamps. | 30. Washboilers. |
| 34. Clothes-driers. | 31. Washtubs. |
| 12. Clothes-line fasteners. | Washing-machines— |
| 14. Clothes-line reels. | 15. Agitator, |
| 3. Clothes-lines. | 16. Boiler, |
| 5. Clothes-pounders. | 17. Combined washing and wringing, |
| 6. Clothes sticks and tongs. | 18. Cylinder, |
| 7. Flnting-irons. | 37. Miscellaneous, |
| 8. Hand-rubbers. | 19. Pounder, |
| 19. Ironing-machines. | 20. Reciprocating-rubber, |
| 10. Ironing-tables. | 21. Rocking and swinging, |
| 11. Laundries. | 22. Roller, |
| 13. Mangles. | 23. Roller and bed, |
| 26. Sad-irons. | 24. Rotary-rubber. |
| 27. Sad-iron holders. | 32. Wringers. |
| 28. Starching-machines. | 33. Wringer-rolls. |
| 35. Washbenches. | |

CLASS 51.—GRINDING AND POLISHING. (XXVII.)

Sub-classes.

- | | |
|----------------------------------|--------------------------------|
| 1. Abrading materials and tools. | Metal— |
| 17. Boots and shoes. | 8. Mower and reaper knives, |
| Glass and stone— | 9. Needle-eyes, |
| 3. Curvod surfaces, | 10. Needles, rods, and points, |
| 11. Plane snrfaces. | 12. Plane snrfaces, |
| Metal— | 14. Rumbles, |
| 2. Card-grinding, | 15. Sheet metal and wire, |
| 4. Curved snrfaces, | 16. Strops, hones, and rifles. |
| 6. Cutlery-scourers, | Wood— |
| 7. Edge-tools, | 5. Curved surfaces, |
| | 13. Plane surfaces. |

CLASS 141.—WASHING APPARATUS. (XXVII.)

Sub-classes.

- | | |
|--------------------------------|---------------------------|
| 6. Barrel-washers. | 10. Dish-cloth holders. |
| 7. Bottle and can washers. | 11. Dish-drainers. |
| 9. Dish-cleaners. | 12. Pitching casks. |
| 8. Dish cleaners and drainers. | 3. Tumbler-washers. |
| Combined | 5. Wool-washing machines. |

DIVISION XXVIII.

EXAMINER W. W. TOWNSEND.

CLASSES—123, Air and Gas Engines; 34, Driers; 98, Pneumatics; 62, Refrigeration; 170, Wind-Wheels.

CLASS 123.—AIR AND GAS ENGINES. (XXVIII.)

Sub-classes.

- | | |
|-------------|---------------|
| Engines— | Engines— |
| 1. Air, | 3. Explosive, |
| 2. Caloric, | 4. Gas. |

CLASS 34.—DRIERS. (XXVIII.)

Sub-classes.

- | | |
|---------------------------|-------------------------|
| 1. Absorbent. | 25. Push-bar. |
| 2. Baffles and screens. | 26. Racks and stands. |
| 3. Condensers. | Reels— |
| Cylinder— | 27. Skein. |
| 4. External, | 28. Tray-carrier, |
| Internal— | 29. Winding. |
| 5. Rotary horizontal, | 30. Retort. |
| 6. Rotary inclined, | 31. Rolls. |
| 7. Stationary horizontal, | 32. Rotary disk. |
| 8. Stationary inclined, | Shafts— |
| 9. Vertical. | 33. Inclined, |
| 10. Disk and hopper. | 34. Vertical, |
| 11. Elevator. | 35. Zigzag. |
| 12. Endless carrier. | 36. Shaft and cylinder. |
| 13. Endless scraper. | 37. Shaft and shelf. |
| Floors— | 38. Shaking. |
| 14. Fixed, | 39. Shelf and tray. |
| 15. Tilting section. | 40. Sliding rack. |
| 16. Forms and platens. | 41. Solar. |
| 17. Frames and trays. | 42. Spiral. |
| 18. Heaters. | 43. Stirrers. |
| 19. Houses and kilns. | 44. Trough and beater. |
| 20. Lath and chain. | 45. Trough and screw. |
| 21. Pans. | Truck and rail— |
| 22. Pan and boiler. | 46. Horizontal, |
| 23. Pan and scraper. | 47. Inclined. |
| 24. Processes. | 48. Web. |

CLASS 98.—PNEUMATICS. (XXVIII.)

Sub-classes.

- | | |
|-----------------------|-------------------------|
| 1. Aerial navigation. | Fans— |
| Air and gas pumps— | 29. Toilet. |
| 31. Hydraulic, | 35. Pneumatic railways— |
| 32. Mechanical, | 36. Dispatch-carriers. |
| 33. Mercury, | 37. Dispatch-tubes. |
| 34. Rotary. | 38. Motor-charging. |
| 5. Bellows. | 15. Sand-blowers. |
| Chimneys and cowl— | Ventilation— |
| 22. Rotary, | 7. Car, |
| 23. Stationary. | 10. Grain, |
| 28. Fan attachments. | 11. House, |
| Fans— | 12. Mine. |
| 27. Automatic, | 19. Window-ventilators. |

CLASS 62.—REFRIGERATION. (XXVIII.)

Sub-classes.

- | | |
|---------------------------|-----------------------------|
| 1. Air-cooling apparatus— | 8. Implements. |
| 15. Air-expansion. | 16. Lard-coolers. |
| 2. Beer-coolers. | 10. Refrigerators. |
| 3. Corpse-coolers. | 11. Refrigerator-buildings. |
| 4. Ice-cream freezers— | 12. Refrigerator-cars. |
| 17. External freezing. | 13. Water-coolers. |
| 6. Ice-machines. | 14. Wine-coolers. |

CLASS 170.—WIND-WHEELS. (XXVIII.)

Sub-classes.

- | | |
|--------------------------|--------------------------------|
| 4. Automatic regulators. | Wind-wheels— |
| 5. Gearing. | 7. Oscillating, |
| Wind-wheels— | 2. Vertical feathering-blades, |
| 1. Horizontal, | 3. Vertical solid-wheel. |

DIVISION XXIX.

EXAMINER MORRIS.

CLASSES.—20, Carpentry; 147, Coopering; 108, Roofing; 157, Wheelwright-Machines; 143, Wood-Sawing; 142, Wood-Turning; 144, Woodworking-Machines; 145, Woodworking-Tools.

CLASS 20.—CARPENTRY. (XXIX.)

Sub-classes.

- | | |
|-----------------------------|---------------------------|
| 53. Ceiling center-pieces. | 14. Shutters— |
| 34. Compound lumber. | 44. Sliding. |
| 54. Corner-shields. | 45. Swinging. |
| 2. Doors— | 15. Skylights. |
| 23. Car— | 33. Spices and joints. |
| 51. Grain. | 17. Stairs. |
| 24. Sliding. | 18. Stair-covers. |
| 56. Door and window frames. | 31. Thresholds. |
| 32. Drip-troughs. | 62. Voting-booths. |
| 4. Floors. | 63. Weather-boarding. |
| 5. Frame houses. | Weather-strips— |
| 9. Lathing. | 35. Hinged— |
| 57. Mantels. | 37. Sills. |
| 10. Marquetry. | 38. Packing. |
| 39. Mats— | 36. Sliding. |
| 67. Metallic. | Window— |
| 43. Wire. | 46. Chairs. |
| 26. Moldings. | 40. Guards. |
| 58. Panels and wainscoting. | 47. Sashes— |
| 11. Portable houses. | 48. Sliding. |
| 12. Scaffolds— | 50. Sliding and swinging. |
| 28. Bracket. | 49. Swinging. |
| 60. Trestle. | 20. Windows— |
| 19. Scaffold-binders. | 64. Car. |
| 13. Shingling-brackets. | 66. Wooden walls. |

CLASS 147.—COOPERING. (XXIX.)

Sub-classes.

- | | |
|----------------------------|----------------------|
| 1. Barrel-head making. | 12. Crozing barrels. |
| 2. Barrel-hoop machines. | 6. Crozing staves. |
| 3. Barrel-making machines. | 13. Hoop-drivers. |
| 4. Basket-making machines. | 8. Jointing staves. |
| 5. Box-machines. | 10. Wooden articles. |
| 11. Coiling. | |

CLASS 108.—ROOFING. (XXIX.)

Sub-classes.

- | | |
|-------------------------|-----------------------|
| 1. Battening. | Metallic— |
| 9. Car. | 15. Standing-seam. |
| 12. Conductor-supports. | 10. Portable. |
| 2. Eaves-troughs— | 13. Ridges. |
| 18. Strainers. | 5. Roofs. |
| 3. Fenders. | 6. Slate and shingle. |
| 8. Flashings. | 11. Thatch. |
| 4. Metallic— | 7. Tile. |
| 14. Shingle. | 16. Valleys. |

CLASS 157.—WHEELWRIGHT-MACHINES. (XXIX.)

Sub-classes.

- | | |
|--------------------------|--------------------------|
| 1. Axle-gages. | 8. Tire-setters. |
| 2. Boring hubs. | 9. Wheelwright-machines. |
| 3. Carriage-bow setters. | |

CLASS 143.—WOOD-SAWING. (XXIX.)

Sub-classes.

- | | |
|-------------------------|--------------------------------|
| 11. Log-turners. | Sawing-machines— |
| 15. Saw-hucks. | 32. Reciprocating-saw— |
| 25. Saw-guards. | 21. Scroll. |
| 26. Saw-guides. | 13. Resawing. |
| 16. Saw-hanging. | 20. Shingle— |
| Sawing-machines— | 33. Horizontal-saw. |
| 1. Band-saw. | 28. Tubular-saw. |
| 4. Circular-saw— | 17. Sawmill-appliances. |
| 22. Angular. | 34. Sawmill-carriages. Feed |
| 6. Fire-wood. | 35. Sawmill-carriages. Offset- |
| 23. Radial. | ting |
| 24. Traveling. | 18. Sawmill-dogs. |
| 29. Drag. Crank— | 9. Sawmill set-works. |
| 30. Lever. | 14. Saws. |
| 5. Edgers. | 27. Saw-table gages. |
| 3. Mills. Circular-saw— | 19. Saw-teeth. |
| 31. Auxiliary-saw. | |
| 12. Reciprocating-saw. | |

CLASS 142.—WOOD-TURNING. (XXIX.)

Sub-classes.

- | | |
|------------------------|----------------------------|
| 9. Irregular forms. | 3. Lathe appliances. |
| Lathes— | 8. Oval forms. |
| 12. Automatic-spindle. | 16. Polygonal forms. |
| 2. Gage. | Regular forms— |
| 13. Many-spindle. | 17. Lateral-movement. |
| 14. Single-chuck. | 18. Longitudinal-movement. |
| 15. Tuhular-cutter. | |

CLASS 144.—WOODWORKING-MACHINES. (XXIX.)

Sub-classes.

- | | |
|-------------------------------|-----------------------------|
| 1. Bending wood. | Mortising— |
| 2. Boring— | 61. Rotary cutters. |
| 77. Portable. | 19. Osier-peelers. |
| 43. Boring and reaming. | 22. Pencil-wood. Making |
| 78. Box-nailing machines. | Planers— |
| 6. Clothes-pin machines. | 64. Beveling. |
| 8. Comb-teeth. Cutting | 65. Rotary-cylinder. |
| 80. Cutters— | 66. Rotary-disk. |
| 49. Chain. | 25. Sliding. |
| 9. Rotary-stock. | 23. Planer attachments. |
| 10. Cutting dye-wood. | 27. Planing and matching. |
| 11. Cutting gears. | 28. Planing and sawing. |
| 14. Dovetailing. | 63. Presser bars and rolls. |
| 81. Feed mechanism— | 67. Punching-cutters. |
| 82. Rolls. | 29. Rossing bark. |
| 50. Gaining. | 68. Routing— |
| 51. Machine-tables. | 4. Pattern. |
| 16. Match-splints. Making | Sashes and blinds— |
| 75. Match-trays. | 31. Making. |
| Mitering— | 74. Tenoning. |
| 83. Knife. | 69. Shaving. Fixed-knife |
| 84. Saw. | Slicers— |
| Molding— | 70. Beveling. |
| 85. Axles. | 71. Reciprocating. |
| 52. Clamped-work. | 72. Rotary and oscillating. |
| 53. Hand-feed. | 36. Shivering. |
| 54. Lateral-feed. | 37. Special work. |
| 55. Pattern-feed. | 38. Splitting and huddling. |
| 86. Revolving-feed. | 73. Tenoning and boring. |
| 56. Special-feed. | 40. Universal joiners. |
| 57. Straight-feed. | 46. Wiring blinds. |
| Mortising— | 42. Wooden pins. Making |
| 58. Anger-cutters. | 43. Wooden trays. Making |
| 59. Chisel and anger cutters. | 44. Wood ornamentation. |
| 60. Chisel-cutters. | 45. Working rattan. |

CLASS 145.—WOODWORKING-TOOLS. (XXIX.)

Sub-classes.

- | | |
|-------------------------|----------------------------|
| 1. Angers— | 30. Floor-sets. |
| 25. Conutersink. | 11. Gages— |
| 35. Detachable-lip. | 45. Scratch. |
| 36. Expansible. | 31. Weather-board— |
| 84. Gage attachments. | Marking. |
| 2. Anger-handles— | 12. Hammers and hatchets. |
| 26. Ratchet. | 23. Handsaws. |
| 3. Bench-dogs. | 47. Handsaw attachments. |
| 4. Bench-planes— | 13. Hollow angers. |
| 37. Bit-adjusting. | 52. Mallets. |
| 38. Crozes. | 53. Nail-extractors, Claw— |
| 29. Gage attachments. | 54. Nipper. |
| 51. Bit-sockets. | 16. Saw-handles. |
| 5. Bit-stocks— | 17. Screw-drivers— |
| 27. Ratchet. | 48. Attachments. |
| 6. Box-openers. | 28. Ratchet. |
| 7. Box-scrapers. | 33. Spiral tool-drivers. |
| 22. Cant-dogs. | 18. Spokeshaves— |
| 10. Chalk-line holders. | Adjustable-bit. |
| 8. Chisels— | 55. Tenoing-bits. |
| 39. Gage. | 19. Tools. |
| 9. Clamps— | 20. Tool-handles— |
| 40. Box and miter. | 32. Fastenings. |
| 41. Double-screw. | 50. Sockets. |
| 42. Pivoted-jaw. | 21. Work-benches. |
| 43. Single-screw. | |
| 44. Sliding-jaw. | |

DIVISION XXX.

EXAMINER WOODWARD.

CLASSES.—67, Lamps and Gas-Fittings; 199, Linotyping; 198, Matrix-Making; 88, Optics; 197, Type-Writing Machines.

CLASS 67.—LAMPS AND GAS-FITTINGS. (XXX.)

Sub-classes.

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. Candlesticks— 97. Miners'. 66. Canopy shades and reflectors. 3. Chandeliers. Gas 4. Chimney-holders. 92. Chimneys, Composite— 93. Double, 91. Integral. 99. Collars and tops. 53. Cut-offs, Automatic— 54. Pressure. 89. Distributors. 100. Drip-catchers. Drop-lights— 55. Burner attachments, 56. Counterweight, 57. Friction and clutch, 58. Spring-drum. Extinguishers— 60. Fluid, 59. Mechanical, 61. Pneumatic. 101. Founts. 74. Gas brackets and valves. 7. Gas-burners— 51. Incandescent, 52. Regenerative, 9. Regulating. 8. Gas-fittings. 62. Gas-lighting attachments. 77. Globes— 102. Attachments. 94. Guards. 78. Harps and hangers. 79. Lamp attachments. 53. Lamp-boxes. 33. Lamp-burners— 10. Argand, 11. Multiple-wick. 63. Lamp-lighting attachments. 32. Lamps— 87. Bicycle, 39. Bracket, 76. Carriage, 42. Cigar-lighting, 103. Flash, 16. Forced-draft, 17. Independent-reservoir, 64. No-chimney, Safety-tube and central-draft— 104. Draw-bar, | <ol style="list-style-type: none"> Lamps— Safety-tube and central-draft— 105. Miscellaneous, 106. No-raiser, 107. Rack-bar, 108. Screw-rod, 109. Swiss-screw, 85. Special, 29. Street. 24. Lanterns— 90. Dark, 35. Signal, 46. Submarine, 44. Tubular. 45. Lantern-holders. 71. Lighting implements. 84. Lighting systems. Lights— 96. Christmas-tree, 50. Decorative, 70. Head, 75. Hydrogen-platinum, 34. Signal. Match-boxes— 98. Igniting, 110. Single-delivery. 27. Match-safes. 95. Oil indicators and fillers. 80. Pedestals. 81. Pocket-lighters. 21. Posts. Reflectors— 82. Hooded, 72. Miscellaneous, 68. Side. 37. Refracting attachments. 69. Safety lamps and lanterns. Shade-supports— 111. Double-clamp, 112. Drop, 113. Miscellaneous, 114. Spider, 115. Umbrella. 116. Spark-catchers. 73. Street-light hangers. 38. Torches. 30. Vapor-burners. 117. Vents. 86. Wick-pickers. 88. Wick raisers. Flat- 23. Wicks. |
|---|---|

CLASS 198.—MATRIX-MAKING. (XXX.)

Sub-classes.

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. Bar. 2. Dies. 3. Miscellaneous. 4. Reciprocating die-carrier, electrical. | <ol style="list-style-type: none"> 5. Reciprocating die-carrier, mechanical. 6. Rotary die-carrier. |
|---|---|

CLASS 88.—OPTICS. (XXX.)

Sub-classes.

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. Altitude-instruments. 19. Compasses. 2. Distance-instruments. 23. Eyeglasses. 3. Heliostats. 4. Kaleidoscopes. 5. Lenses. 6. Leveling-instruments. 7. Magic lanterns. 8. Microscopes. 24. Opera-glasses. 20. Optometers. | <ol style="list-style-type: none"> 9. Photometers. 10. Prisms. 11. Sextants. 12. Spectacles. 22. Spectacle-cases. 13. Stakes and targets. 14. Stereoscopes. 17. Surveying-instruments. 15. Telescopes. 21. Testing-instruments. 16. Tripods. |
|--|---|

CLASS 199.—LINOTYPING. (XXX.)

Sub-classes.

- | | |
|--|---|
| <ol style="list-style-type: none"> 5. Bar-machines, Plural— 6. Single. 7. Circulation-machines. 8. Guide-machines. 4. Justifying devices. | <ol style="list-style-type: none"> 3. Linotype-making. 2. Linotypes. 9. Machine attachments. 10. Miscellaneous machines. 11. Rotary linotype-machines. |
|--|---|

CLASS 197.—TYPE-WRITING MACHINES. (XXX.)

Sub-classes.

- | | |
|--|--|
| <ol style="list-style-type: none"> 1. Aligners. 2. Attachments. 3. Bar. 4. Carriages. 5. Cleansrs. 6. Electrical. 7. Index-wheel. | <ol style="list-style-type: none"> 8. Keyboards. 9. Key-wheel— 10. Miscellaneous. 11. Plate. 12. Ribbon mechanism. 13. Stenographic. |
|--|--|

DIVISION XXXI.

EXAMINER ELY.

CLASSES.—195, Alcohol; 203, Ammonia, Water, and Wood-Distillation; 202, Charcoal and Coke; 35, Educational Appliances; 50, Fluid-Pressure Regulators; 48, Gas; 149, Hides, Skins, and Leather; 196, Mineral Oils; 87, Oils, Fats, and Glue; 91, Painting.

CLASS 195.—ALCOHOL. (XXXI.)

Sub-classes.

- | | |
|---------------------------|----------------------------|
| 1. Beer— | Malting— |
| 4. Preserving— | 21. Apparatus— |
| 5. Pasteurizing, | 22. Cylinders, rotary, |
| 2. Purifying— | 23. Malt-stirrers, |
| 3. Finings and shavings. | 24. Processes. |
| 6. Distilled spirits— | Mashing— |
| Aging— | 25. Apparatus— |
| 7. Apparatus— | 26. Digesters and disinte- |
| 9. Rocking racks, | grators, |
| 10. Processes, | 27. Fore-mashers, |
| 11. Apparatus— | 28. Mash-tubs— |
| 12. Stills— | 29. Rakee, |
| 13. Columns, | 30. Tubular rakes, |
| 14. Doublers and worms, | 31. Hops, |
| 16. Vapor-filters, | 32. Processes, |
| 15. Rectifying processes. | 33. Wort— |
| Fermenting— | 34. Hopping, |
| 17. Apparatus— | 35. Purifying, |
| 18. Vats, | 36. Wines. |
| 19. Vent-bungs, | |
| 20. Processes. | |

CLASS 203.—AMMONIA, WATER, AND WOOD-DISTILLA- TION. (XXXI.)

Sub-classes.

- | | |
|----------------|-----------|
| 1. Ammonia. | 5. Water. |
| 2. Turpentine— | 6. Wood. |
| 3. Apparatus, | |
| 4. Processes. | |

CLASS 202.—CHARCOAL AND COKE. (XXXI.)

Sub-classes.

- | | |
|---------------------------|---------------------|
| 1. Charcoal— | Coke— |
| 10. Kilns, | Ovens— |
| 2. Processes, | 6. Doors, |
| 3. Retorts. | 7. Dumping-bottoms. |
| Coke— | 8. Processes. |
| 4. Ovens— | 9. Retort-ovens. |
| 5. Chargers and discharg- | |
| ers, | |

CLASS 35.—EDUCATIONAL APPLIANCES. (XXXI.)

Sub-classes.

- | | |
|---------------------|---------------------|
| 1. Alphabet-blocks. | 6. Maps. |
| 2. Arithmetic. | 12. Miscellaneous. |
| 3. Astronomy. | 8. Penmanship. |
| 15. Blackboards. | 9. Reading. |
| 13. Cryptography. | 10. Slates. |
| 5. Globes. | 14. Slate-mnfflers. |

CLASS 50.—FLUID-PRESSURE REGULATORS. (XXXI.)

Sub-classes.

- | | |
|---------------|------------|
| 4. Cut-offs. | 7. Float— |
| 5. Diaphragm— | 8. Lever. |
| 6. Lever. | 9. Piston. |

CLASS 48.—GAS. (XXXI.)

Sub-classes.

- | | |
|-----------------------------|----------------------------|
| 2. Carburetors— | Gas— |
| 24. Carbureting-lamps, | 30. Producers, |
| 29. Float-vaporizers, | 19. Water, |
| 25. Gas and air mixers, | 20. Wood. |
| 3. Jet-mixers, | 11. Holders. |
| 26. Oil-feed, float-valves, | Purifiers— |
| 27. Oil-feed, rotary, | 31. Boxes, |
| 28. Revolving, | 32. Compounds, |
| 4. Center-seals and by-pass | 33. Condensers, |
| valves. | 34. Miscellaneous, |
| 9. Dip-pipes. | 35. Processes, |
| 22. Distribution— | 36. Revivifying, |
| 46. Leakage. | 37. Trays, |
| 47. Preventing leakage, | 38. Washers and scrubbers— |
| 48. Regulating pressure, | 39. Float, |
| 49. Separators. | 40. Reciprocating, |
| 10. Exhausters. | 41. Rotary. |
| Gas— | 18. Retort-chargers. |
| 5. Coal, | 23. Retort gas-furnaces. |
| 6. Coal and oil, | 16. Retort-lids. |
| 8. Coal and water, | 17. Retorts and settings— |
| 7. Coal, oil, and water, | 42. Attachments, |
| 12. Hydrogen, | 43. Cleaning, |
| 13. Oil, | 44. Domestic plants, |
| 14. Oil and water— | 45. Retorts. |
| 50. Generators—Cupola, | |
| 51. Refractory, | |
| 52. Retort, | |

CLASS 149.—HIDES, SKINS, AND LEATHER. (XXXI.)

Sub-classes.

- | | |
|------------------------------|-----------------------------|
| 8. Apparatus— | Apparatus— |
| 22. Coloring and polishing, | 13. Tanners' tools, |
| 19. Endless belts, | 9. Tanning, |
| 16. Helical tools, | 11. Tumbling-drums, |
| 20. Putting out and stretch- | 10. Vats. |
| ing— | Processes and compositions— |
| 21. Stretching-frames, | 3. Bating, |
| 17. Reciprocating tools— | 7. Coloring and polishing, |
| 18. Rocking frames, | 6. Currying, |
| 23. Rolling and embossing, | 2. Depilating, |
| 14. Rotary cylinders, | 1. Preserving, |
| 15. Rotating tools, | 4. Tanning, |
| 12. Tables and frames, | 5. Tawing. |

DIVISION XXXI.—CONTINUED.

CLASS 196.—MINERAL OILS. (XXXI.)

Sub-classes.

1. Apparatus—	Apparatus—
2. Reducing gravity,	Still—
3. Stills—	16. Vacuum,
6. Bottoms,	17. Vapor-outlets.
5. Condensers,	Coal-oil—
7. Feeders,	21. Processes,
8. Films,	19. Retorts—
9. Furnaces and flues,	20. Rotary.
10. Heads,	22. Compositions—
11. Jackets,	23. Burning-fluid.
12. Rotary,	24. Paraffine.
13. Series,	25. Processes—
4. Stirrers and scrapers,	26. Chemical,
18. Supplementary heating,	27. Injecting gases,
14. Tubular,	28. Residuum,
15. Utilizing gases and residue,	29. Washing and filtering.

CLASS 87.—OILS, FATS, AND GLUE. (XXXI.)

Sub-classes.

17. Adhesives.	12. Refining fat oils.
18. Artificial butter.	13. Rendering.
21. Candles.	23. Soap articles.
3. Candle apparatus.	15. Soap-cutting.
4. Decomposing fats.	24. Soap-frames.
5. Detergents.	16. Soap-manufacture.
6. Extracting oils.	25. Soap-presses.
7. Glue.	26. Saint.
9. Lubricants.	19. Wax.

CLASS 91.—PAINTING. (XXXI.)

Sub-classes.

Apparatus—	Compositions—
23. Air-brushes,	Mixed paints—
Brushes or rolls—	60. Alkali,
24. Fixed,	40. Barrel-linings,
25. Reciprocating,	41. Oil,
26. Dipping-tanks,	61. Rubber,
27. Enameling wood,	42. Tar,
28. Fountain-discharge,	62. Vulcanized,
29. Heaters,	43. Water—
30. Indenting and filling machines,	44. Soluble silicates,
31. Paint-mixers,	45. Pigments—
32. Pots and tools,	46. Lamp-black,
Rolls or webs—	47. Lead salts,
33. Continuous-motion,	48. Ultramarine,
hand,	49. Zinc salts,
34. Interrupted-motion,	50. Stove-polishes,
hand,	Varnishes—
35. Work-holders.	52. Alkali,
Compositions—	Making—
58. Driers,	51. Processes and apparatus,
59. Fillers,	53. Oil,
36. Fireproofing compounds,	54. Pyroxyline,
Inks—	55. Tar.
37. Copying and sensitive,	Processes—
38. Printing,	56. Processes,
39. Writing,	57. Japanning.

DIVISION XXXII.

ACTING EXAMINER WITHERSPOON.

CLASSES.—180, Accouterments; 40, Advertising; 190, Baggage; 209, Carbonating Beverages; 210, Packaging and Dispensing Liquids; 150, Packing and Storing Vessels.

CLASS 180.—ACCOUTERMENTS. (XXXII.)

Sub-classes.

- | | |
|-------------------------------|-------------------------------|
| 1. Accouterments. | 23. Scabbards— |
| 16. Cartridge-belts. | 24. Hangers. |
| 17. Cartridge-boxes— | 25. Tents— |
| 18. Cartridge-feed. | 26. Bed, |
| 19. Game-belts. | 27. Frames, |
| 20. Gun and pistol holders. | 28. Pegs and poles, |
| 15. Knapsacks and haversacks. | 29. Shelter, |
| 21. Knapsack-slings. | 20. Pipe-shields and ventila- |
| 22. Safety-harness. | tors. |

CLASS 40.—ADVERTISING. (XXXII.)

Sub-classes.

- | | |
|-------------------------|------------------------------|
| 1. Articles— | 84. Sign dummies. |
| 78. Multiple-card, | 6. Sign-letters. |
| 77. Single-card. | 4. Signs— |
| 75. Card-exhibitors— | 7. Automatic figure, |
| 76. Droppers, | 58. Belt, |
| 20. Rotary, | 59. Endless-belt— |
| 21. Sliding. | 89. Motors—Clock, |
| 3. Card-racks. | 90. Vehicle, |
| 22. Change-receivers. | 60. Guide-post, |
| 25. Display-box covers. | 65. Hanging, |
| 26. Display-boxes— | 61. Illuminated— |
| 27. Sample-holders. | 91. Lantern, |
| 28. Display-cards. | 92. Perforated, |
| 40. Display-trays. | 62. Interchangeable-letter, |
| 41. Drawer-plates. | 63. Interchangeable-slide, |
| 43. Embroidery-cases. | 64. Mechanically-rotated, |
| 9. Labels. | 86. Multiple-plate, |
| 10. Label-holders. | 87. Raised letters, |
| 79. Clip, | 65. Rotatable, |
| 80. Freight-car, | 88. Single-plate, |
| 81. Hat, | 66. Street-lamp, |
| 82. Slide, | 67. Vibrating, |
| 83. Street-car. | 73. Vending devices. Ribbon- |
| 52. Pattern-exhibitors. | holders. |

CLASS 190.—BAGGAGE. (XXXII.)

Sub-classes.

- | | |
|-------------------------|---------------------------------|
| 8. Book-clamps. | 5. Trunks— |
| 1. Camp and lunch kits. | 6. Convertible— |
| 2. Canteens and flasks. | 24. Bed, |
| 3. Hat and fur cases. | 25. Bureau, |
| 4. Musicians' cases. | 26. Desk and table, |
| 9. Package-carriers. | 27. Wardrobe, |
| 10. Package-handles. | 28. Corner-shields, |
| 11. Saddle-bags. | 29. Cylindrical, |
| 12. Shawl-straps. | 30. Extensible, |
| 13. Toilet-kits. | 31. Followers, |
| 7. Traveling-bags— | 32. Handles, |
| 14. Convertible, | 33. Hinge-stays, |
| 15. Fasteners— | 34. Lid-stays, |
| 16. Pivoted, | 35. Straps and strap-fasteners, |
| 17. Frameless, | 36. Supporting devices, |
| 18. Frames— | 37. Trays, |
| 19. Top-opening, | 38. Tray lifters and support- |
| 20. Handles, | ers, |
| 21. Handle-fasteners, | 39. Wall. |
| 22. Hinge-stays, | |
| 23. Telescoping. | |

CLASS 209.—CARBONATING BEVERAGES. (XXXII.)

Sub-classes.

- | | |
|----------------------------|-----------------------|
| 7. Beverages. | 15. Gas-collection. |
| 1. Carbonators— | 16. Gas-distribution. |
| 10. Beer— | 4. Gas Generators— |
| 11. Atomizer, | 6. Acid-feed siphon, |
| 12. Pressure, | 17. Furnace, |
| 13. Pump, | 5. Rotary-stirrer. |
| 3. Rotary-mixer, | |
| 14. Spray. | |
| 8. Carbonators and genera- | |
| tors— | |
| 9. Portable. | |

CLASS 210.—PACKAGING AND DISPENSING LIQUIDS. (XXXII.)

Sub-classes.

- | | |
|---------------------------|---------------------------|
| 1. Beer-dispensing— | Filling-machines— |
| 2. Barrel-taps, | 24. Gage— |
| 3. Fancets— | 25. Sirup, |
| 4. Foam, | 26. Reciprocating-head, |
| 5. Pump, | 27. Siphon-tube. |
| 6. Foam-separators, | 28. Filling and corking— |
| 7. Pipe-cleaners, | 35. Reciprocating-head, |
| 8. Pressure— | 29. Internal-stopper, |
| 9. Gas, | 30. Turn-over. |
| 10. Pump. | 36. Oil-dispensing tanks— |
| 11. Capping-machines. | 42. Cabinet, |
| 12. Corking-machines— | 37. Drainers— |
| 13. Hand-tools, | 43. Pump— |
| 14. Magazine-feed. | 44. Inclosed, |
| 15. Dispensing-fountains— | 38. Followers, |
| 16. Cans—Horizontal, | 45. Nozzles, Pivoted— |
| 17. Vertical. | 46. Section, |
| 18. Draft apparatus— | 47. Vent, |
| 20. Pressure-reducers, | 39. Pressure— |
| 31. Liquid-holders, | 48. Blow, |
| 19. Portable— | 49. Bulb, |
| 32. Bottle-taps, | 50. Piston, |
| 33. Siphons, | 41. Pump, |
| 34. Pump. | 42. Siphon. |
| 21. Filling-machines— | |
| 22. Cut-offs, Automatic— | |
| 23. Float, | |

CLASS 150.—PACKING AND STORING VESSELS. (XXXII.)

Sub-classes.

- | | |
|-----------------------------|-------------------------------|
| 178. Ballot-boxes— | Letter-boxes— |
| 225. Ball, | 244. Parcel. |
| 226. Canceling, | 183. House— |
| 227. Closures. | 245. Closures— |
| 179. Fare-boxes— | 254. Bottom, |
| 180. Change, | 246. Pivoted-body, |
| 228. Check-receivers, | 247. Sliding, |
| 230. Closed-slot, | 248. Collection and delivery, |
| 229. Conveyers, | 249. Door-jamb lock, |
| 231. Detachable locking-re- | 250. Name-plate, |
| ceptacle, | 251. Package— |
| 181. Portable— | 252. Locking, |
| 232. Closures, | 253. Signal. |
| 233. Shelf, Rotating— | |
| 236. Serrated, | |
| 237. Sliding, | |
| 234. Tilting— | |
| 235. Multiple. | |
| 182. Letter-boxes— | |
| 238. Chutes, Discharge— | |
| 239. Double-trap, | |
| 240. Receiving— | |
| 241. Rotary, | |
| 242. Detachable-receptacle, | |
| 243. Indicators, | |
- Cloth, leather, and rubber—*
- | |
|---------------------|
| 191. Bag-closures— |
| 192. Bar. |
| 134. Bag-fasteners— |
| 193. Cord, |
| 194. Cleat, |
| 195. Clamp, |
| 197. Hinged-jaw, |
| 198. Locking-lever, |
| 199. Strap, |
| 196. Tie. |

DIVISION XXXII.—CONTINUED.

CLASS 150.—PACKING AND STORING VESSELS. (XXXII.)

Continued.

Sub-classes.

Cloth, leather, and rubber—

- 128. Bags.
- 129. Baskets and buckets.
- 130. Boxes.
- 170. Mail-bags—
- 200. Closures—
- 201. Angular-frame,
- 202. Flap—
- 203. Corner folds,
- 204. Sliding fastener,
- 205. Turning fastener,
- 206. Pivoted jaw,
- 207. Top-slide,
- 208. Label-holders—
- 209. Card-clamps.
- 187. Pocket-book fasteners and frames.
- 185. Pocket-book holders.
- 186. Pocket-books.
- 188. Portfolios—
- 189. Roll.
- 190. Purses.

Glass and pottery—

- 11. Bottles and jugs—
- 126. Neck-collars,
- 135. Brush and spreader.
- 43. Boxes and tanks.
- 18. Ejectors.
- 12. Jackets—
- 81. Stands,
- 74. Wrapper.
- 44. Jars—
- 73. Clamp,
- 96. Expanding-stopper,
- 75. Screw-cap,
- 97. Screw-stopper,
- 79. Swing-cover,
- 80. Swing-fastener.
- 15. Stopper-fasteners—
- 77. Cap and tie,
- 99. Screw-cap,
- 86. Swing,
- 87. Swing-stopper—
- 164. Aside,
- 165. Yoke,
- 166. Yoke and lever,
- 167. Yoke and top lever.
- 16. Stopper-locks.
- 107. Stopper-pullers.
- 17. Stoppers—
- 105. Cap,
- 145. Dose,
- 88. Expanding,
- 48. Internal,
- 147. Rotary,
- 53. Screw—
- 106. Cap,
- 146. Tube,
- 49. Valve—
- 124. Screw.

Metallic vessels—

- 47. Baskets and crates.
- 29. Boxes—
- 85. Blacking,
- 137. Compartment,
- 83. Knockdown,
- 84. Pocket.
- 51. Canisters.
- 30. Cans and unclassified vessels—
- 100. Single-blank.
- 54. Casks.
- 55. Closures—
- 56. Clamp,
- 57. Screw-cap,
- 98. Screw-stopper,
- 58. Seam or solder—
- 171. Rip,
- 108. Swing-cover.
- 52. Coal-scuttles.
- 110. Ears and bails.
- 221. Garbage-receptacles—
- 232. Buckets,
- 223. Pivoted.
- 111. Handles.
- 33. Hermetic sealing.
- 34. Jackets—
- 62. Cask,
- 63. Package,
- 123. Stand.
- 61. Jackets and stands. Swing—
- 64. Linings.
- 36. Milk-cans.

37. Nozzles and vents—

- 114. Screw,
- 65. Screw-cap,
- 66. Valve—
- 115. Screw.
- Paint-tubes—
- 210. Collapsible.
- 116. Spouted—
- 117. Feeders—
- 118. Piston.
- 121. Storage.
- 122. Transport.

Paper vessels: bags—

- 142. Bags—
- 143. Closures,
- 144. Square-bottom.

Paper vessels: barrels and pails—

- 82. Barrels.
- 148. Pails.

Paper vessels: Boxes. Angular—

- 149. Boxes. Angular—
- 150. Blanks. Plural,
- 151. Compartment—
- 152. Folded,
- 153. End folds,
- 154. Side and end folds,
- 155. Side folds,
- 156. Side folds and end laps,
- 157. End laps,
- 158. Side and end laps,
- 159. Side laps,
- 160. Slide,
- 161. Stays.

Paper vessels: Boxes. Curved—

- 162. Boxes. Curved—
- 163. Compartment.

Wooden vessels: barrels, buckets, and pails—

- 132. Barrels—
- 1. Bent,
- 101. Bungs,
- 4. Bungs and vents—
- 102. Expanding,
- 103. Plug,
- 5. Bung-wrenches,
- 133. Closures—
- 127. Screw and bayonet,
- 172. Compartment,
- 6. Covers,
- 213. Heads,
- 7. Hoops,
- 211. Knockdown,
- 8. Linings and coverings,
- 10. Stands,
- 212. Ventilating.

Wooden vessels: baskets—

- 41. Baskets—
- 91. Covered,
- 67. Folding.

Wooden vessels: boxes—

- 19. Boxes—
- 169. Bent—
- 92. Closures,
- 93. Single-blank,
- 95. Block,
- 20. Can and bottle cases—
- 215. Vial-cases,
- 21. Cell-cases—
- 68. Cloth or cord,
- 69. Paper—
- 141. Boxes.
- 70. Wood—
- 71. Veneer.
- 92. Closures,
- 140. Compartment,
- 22. Crates—
- 216. Fruit-boxes,
- 217. Hat,
- 218. Package,
- 219. Poultry,
- 23. Crates and boxes, Folding—
- 220. Poultry—
- 109. Knockdown,
- 104. Linings and coverings,
- 27. Powders. Cases for
- 113. Stays, Corner—
- 112. Straps,
- 124. Toilet and silverware.

DIVISION XXXIII.

EXAMINER SEELY.

TRADE-MARKS.

This classification has no official character, but is a grouping of merchandise kindred in character to facilitate search by the Office. The parenthetical references point to the titles of analogous groups into which the field of search may extend, depending on the nature of the merchandise.

TRADE-MARKS.

Titles.

1. Agricultural implements. (See Title 41, 73.)
2. Baking-powder and yeast. (See Title 20.)
3. Beverages. (See Title 42.)
4. Blacking and leather-dressing. (See Title 12.)
5. Boots, shoes, and lasts. (See Title 57.)
6. Brooms and brushes.
7. Buttons. (See Title 22.)
8. Canned goods. (See Title 16, 26.)
9. Carpets, &c.
10. Cement, plaster, and bricks.
11. Cigars and cigarettes. (See Title 71.)
12. Cleaning and polishing preparations. (See Title 4.)
13. Coffee and tea.
14. Confectionery.
15. Corsets. (See Title 75.)
16. Cured meats. (See Title 8, 26, 37.)
17. Cutlery and edge-tools. (See Title 73, 68.)
18. Dairy products.
19. Dentistry.
20. Drugs and chemicals. (See Title 44, 53, 72.)
21. Dry goods. (See Title 23, 69.)
22. Fancy goods. (See Title 7, 21, 30, 47.)
23. Fertilizers. (See Title 20.)
24. Firearms, ammunition, and explosives.
25. Flour.
26. Food and relishes. (See Title 8, 16, 62.)
27. Fuel.
28. Games and toys. (See Title 46.)
29. Glassware. (See Title 32, 55.)
30. Gloves. (See Title 22.)
31. Head-wear.
32. Household articles. (See Title 29, 35, 55.)
33. Inks. (See Title 65.)
34. Iron, steel, and manufactures. (See Title 41, 73.)
35. Jewelry and plated ware. (See Title 32, 70.)
36. Lamps, lanterns, &c. (See Title 29.)
37. Lard and tallow. (See Title 16, 18.)
38. Laundry articles. (See Title 32, 61, 64.)
39. Leather and saddlery.
40. Locks and hardware. (See Title 72, 73.)
41. Machines. (See Title 1, 34, 73.)
42. Malt liquors. (See Title 3, 63.)
43. Matches.
44. Medical compounds. (See Title 20, 53, 72.)
45. Miscellaneous.
46. Musical instruments. (See Title 29.)
47. Needles and pins. (See Title 22.)
48. Oils and lubricants. (See Title 51.)
49. Optics and measuring-instruments. (See Title 73.)
50. Packing. (Machinery.) (See Title 39, 57.)
51. Paints and painters' supplies. (See Title 48.)
52. Paper and envelopes. (See Title 65.)
53. Poisons for animals. (See Title 20, 44.)
54. Publications.
55. Receptacles. (See Title 29, 32.)
56. Rope, cord, and twine. (See Title 59.)
57. Rubber goods. (See Title 5, 50, 69.)
58. Sewing-machines and attachments. (See Title 41, 73.)
59. Sewing silk, cotton, and thread. (See Title 56.)
60. Shirts, collars, and cuffs. (See Title 75.)
61. Soap. (See Title 38, 72.)
62. Spices, mustard, and salt. (See Title 26.)
63. Spirituous liquors. (See Title 42, 77.)
64. Starch, corn-starch, and products. (See Title 26, 38.)
65. Stationery miscellany. (See Title 33, 52.)
66. Stoves and heaters.
67. Sugar, sirup, and molasses.
68. Surgical instruments and appliances. (See Title 17.)
69. Tailoring and clothing. (See Title 24, 57, 75.)
70. Time-keeping instruments. (See Title 35.)
71. Tobacco and snuff. (See Title 11.)
72. Toilet articles and preparations. (See Title 20, 61.)
73. Tools and devices.
74. Umbrellas, parasols, and canes.
75. Underwear and furnishing. (See Title 15, 60.)
76. Vehicles.
77. Wines. (See Title 3, 42, 63.)

PRINTS AND LABELS.

Not classified, but arranged in chronological order and preserved for reference in the Examiner's room.

DIVISION XXXIV.

EXAMINER SIMPSON.

CLASSES.—188, Railway-Brakes; 213, Railway Draft Appliances; 105, Railway Rolling-Stock.

CLASS 188.—RAILWAY-BRÁKES. (XXXIV.)

Sub-classes.

- | | |
|-----------------------------|--------------------------------|
| 16. Automatic— | 13. Fluid-pressure— |
| 17. Draw-bar actuated— | 14. Train-pipe couplings, |
| 19. Centrifugal governor, | 15. Train-pipe release valves, |
| 18. Winding, | 8. Train-pipe stop-cocks, |
| 20. Push-rod actuated— | 15. Triple valves, |
| 21. Winding, | 6. Vacuum, |
| 22. Beams, | 40. Hand-levers— |
| 23. Brake-flange on wheel. | 41. Ratchet-drum, |
| 24. Brakes, | 42. Ratchet-segment, |
| 25. Brake-shoes— | 43. Load-regulated, |
| 26. Chills, | Locomotive— |
| 27. Composite faces, | 44. Connected series, |
| 28. Fasteners, | 45. Shoes between drivers. |
| 29. Non-metallic, | 46. Positive lock, |
| 30. Rail, | 47. Rail— |
| 31. Recessed faces. | 48. Grippers, |
| 32. Conduit-slot. | 49. Slack-adjusters— |
| Disk on axle— | 50. Ratchet-bar, |
| 33. Brake-band, | 51. Ratchet-driven screw. |
| 34. Peripheral shoes, | 52. Staffs— |
| 35. Side shoes. | 53. Friction-clutch handles, |
| 36. Electric— | 54. Geared, |
| Magnetic clutch— | 55. Locking-ratchets, |
| 37. Winding-drum, | 56. Ratchet-handles— |
| 38. Magnetic shoes, | 57. Pivoted, |
| 39. Solenoid-operated. | 58. Screw, |
| Fluid pressure— | 59. Winding attachments. |
| 1. Automatic. | 60. Top shoes. |
| 9. Brake-piston indicators, | 61. Train-operated— |
| 10. Brake-release valves, | 62. Rotary shafts, |
| 2. Derailment, | 63. Winding. |
| 3. Direct, | 64. Wheel and rail— |
| 4. Electric, | 65. Chock-block. |
| 7. Engineers' valves, | Winding— |
| 11. Load-regulated valves, | 66. Pneumatic shift. |
| 5. Momentum-pump, | 67. Winding-axle. |
| 12. Pressure-retainers, | 68. Winding-drum. |

CLASS 213.—RAILWAY DRAFT APPLIANCES. (XXXIV.)

Sub-classes.

- | | |
|-----------------------------------|------------------------------|
| 39. Buffers— | Couplings— |
| 2. Fluid-pressure. | 12. Pivoted vertical latches |
| Bumpers— | 13. Safety-brackets, |
| 3. Rigid. | 14. Vertical sliding pins, |
| Couplings— | Link— |
| 35. Arrowhead and jaws, | 15. Star-wheel detent, |
| 36. Bails, | 47. Link-lifters, |
| 37. Beveled link and fixed catch, | 49. Miller hook, |
| 38. Beveled link and swing catch, | 50. Pins and links, |
| 40. Combined air-brake, | Pin-supports— |
| Combined draw-bar and hook— | 16. Balls, |
| 4. With link, | 51. Gravity, |
| 43. Headed link and V-slot, | 52. Spring, |
| 44. Hook and catch, | 54. Rolling detent, |
| 45. Hook and link— | 53. Rotary heads, |
| 5. Combined, | 55. Sliding detent, |
| Janney type— | 56. Swing-pins, |
| 6. Emergency-releases, | 57. Tools, |
| 7. Gravity-locks, | 58. Train, |
| 8. Horizontal sliding latches, | 17. Twin jaws, |
| 9. Knuckle-openers, | 59. Uncoupling-levers. |
| Knuckle-openers and locks— | 1. Draft-cable, |
| 10. Combined, | 42. Draw-bars— |
| 11. Pivoted horizontal latches, | 41. Continuous, |
| | 18. Street-car, |
| | Locomotives— |
| | 19. Side-track push-rods. |
| | 20. Street-car poles. |

CLASS 193.—RAILWAY ROLLING-STOCK. (XXXIV.)

Sub-classes.

- | | |
|--|----------------------------------|
| 4. Axles— | Cars— |
| Divided— | Street— |
| 258. Fixed middle bearings, | 92. Convertible open and closed, |
| 66. With couplings, | 35. Hand-straps, |
| 67. Wheel-attaching devices, | 214. Reversible, |
| 68. With sleeved and fixed wheels, | 93. Storm-fronts, |
| Bevel-ended— | 61. Vestibule, |
| 69. Non-telescoping. | 216. Derailers and replacers. |
| 63. Car-movers— | 94. Derailment-guards— |
| 132. Flange or axle grip, | 215. Inclined wheels, |
| 70. Pinch-bars— | 95. Rail-interlocking, |
| 71. With rail-grip, | 96. Supplemental wheels. |
| 72. Pushing-jacks, | 17. Locomotives— |
| 73. Traction-wheels. | 217. Belt-gearing, |
| Cars— | 97. Draw-bar lifters, |
| 133. Bell-cord hangers, | Electric— |
| 74. Dining, | 218. Belt-gearing, |
| 14. Dumping— | 219. Friction-roller driven, |
| 184. Convertible flat and hopper bottom, | 220. Geared, |
| 185. Hopper-bottom, | 221. Intermittent-grip, |
| Inclined-bottom— | 222. Longitudinal gear-shafts, |
| Side doors, | 223. Longitudinal worm-shafts, |
| 187. Inwardly-tilting sections, | 224. Friction-roller driven, |
| 188. Outwardly-tilting sections— | 225. Intermittent-grip. |
| Displaceable sides, | 227. Longitudinal shafts, |
| 189. Tilting-body— | 228. Rack-rail, |
| Displaceable sides, | 226. Swinging-bogie. |
| 191. Express— | 98. Telescoping pilots, |
| 75. Burglar-proof, | 99. Traction-increasers— |
| 76. Floor-frames, | 175. Electric, |
| 15. Freight— | Gripping-drivers. |
| 192. Frames, | Mail-bag delivery— |
| 77. Fruit, | 230. Car-forks, |
| 78. Removable covers, | 231. Catchers and cranes, |
| 193. Removable side sections, | 232. Cranes. |
| 79. Rolling, | Motors— |
| 194. Running boards and rails, | 102. Manually-operated, |
| 182. Stakes— | 101. Spring, |
| 173. Releasable, | 100. Tread power. |
| 174. Side-folding, | 60. Sanding devices— |
| 195. Steps and platforms, | 176. Chain-feed, |
| 16. Hand— | 177. Oscillatory-feed, |
| 196. Geared, | Reciprocatory-feed— |
| 197. Lamp arrangement, | 178. Horizontal, |
| 198. Merchandising, | 179. Vertical, |
| Open street— | 180. Rotary-feed. |
| 80. Seats, | 233. Single rail— |
| 81. Side guards, | 234. Side guides— |
| 19. Passenger— | 235. Locomotives. |
| Baskets, | 236. Single top and bottom rail. |
| 109. Double-deck, | 181. Sound-deadening devices. |
| 200. Dust-guards, | 24. Springs— |
| Emergency-exits, | 117. Coil— |
| 201. Frames, | 118. Cap and bed plates, |
| 202. Head-rests, | 119. Coil and rubber, |
| 83. Individual safes, | 120. Conical volute, |
| Platform extensions— | 121. Elliptic— |
| With gates, | 122. Cap and bed plates, |
| Platform-gates, | 123. Multiple-disk, |
| 204. Platforms, | 134. Pneumatic, |
| 205. Seat and door arrangement, | 124. Rubber— |
| 85. Steps— | 125. Cap and bed plates, |
| Extension— | 126. Zigzag. |
| 86. Folding, | 26. Starters. |
| 87. Sliding, | 27. Starters and brakes. |
| With gate, | 237. Suspended. |
| 21. Safety-bridges, | Trains— |
| 23. Sleeping— | 238. Power-transmitters, |
| 90. Berth-guards, | 32. Trucks— |
| 206. Berth-locks, | 135. Antifriction-wheels, |
| 207. Compartment arrangement, | 103. Bolsters— |
| 208. Convertible seat and berth, | 104. Cast, |
| 89. Curtains and rods, | 105. Guides, |
| 209. Hinged berths, | 106. Pressed-steel, |
| 91. Ladders, | 107. Trussed, |
| 210. Partitions, | 957. Cable-grip, |
| 211. Seat-back and upper berth, | 108. Center bearings— |
| 212. Suspended berths, | 109. Pressed-steel, |
| 28. Steam street, | 110. Roller, |
| 31. Street— | 11. Changeable-gage, |
| 213. Awnings, | Curve-adjusters— |
| | Swiveled-wheel, |
| | Electric-motor, |
| | 239. Bogies, |
| | 240. Equalizing-levers, |
| | 241. Motor-supporters, |
| | 242. Rigid-frame. |

DIVISION XXXIV.—CONTINUED.

CLASS 105.—RAILWAY ROLLING STOCK. (XXXIV.)

Continued.

Sub-classes.

Trucks—	Wheels—
Four wheel—	143. Epicycle,
243. Bogies,	Flanges—
Curve-adjusters—	149. Independent movement,
137. Axles, radial,	Integral—
138. Axles, sectional.	Cast—
111. Frames—	150. Hollow webs,
112. Pressed-steel,	151. Roller-bearings,
113. Pedestals,	Spokes—
114. Safety-supporters,	153. Cast in,
115. Side bearings—	Metallic—
116. Roller,	154. Detachable,
Six-wheel—	155. Wooden,
244. Bogies,	156. Tire-fasteners—
Curve-adjusters—	158. Bolted lap-flanges,
139. Axles, radial,	157. By casting,
245. Supplemental.	159. Integral lugs,
246. Velocipedes,	160. Transverse intermedi-
247. Bicycle attachments,	ate keys,
248. Geared.	Tires—
Wheel-bodies—	Cushioned—
140. Cast in tires,	161. Metallic springs,
141. Cast on hubs.	162. Rubber,
33. Wheel-fenders—	163. Wooden blocks,
249. Car and truck equalizer,	164. Loose,
250. Combined brake,	165. Non-metallic,
251. Fixed-scoop,	166. Roller-supported,
252. Foldikg hinged-scoop,	Webs—
253. Hinged-scoop,	167. Sheet-metal disks—
Inclined—	168. Non-metallic filling,
127. Tilt-up front,	169. Single,
128. Obstacle projectors,	Split castings—
254. Pilot type,	Detachable tires,
Rotary—	170. Wooden,
129. Positively-driven,	171. Webs and tires—
130. Trip and drop-scoop,	172. Pressed-steel.
255. Trip and shoot forward,	182. Wheel-tread surfaces—
256. Wheeled-scoop,	142. Form,
131. Wheel-tread,	143. Multiple,
Wheels—	144. Peripheral rollers,
146. Bushings,	145. Recessed.
147. Counterbalances,	

SUB-CLASSES ALPHABETICALLY ARRANGED

WITH THE

NUMBER OF PATENTS IN EACH SUB-CLASS ON JANUARY 1, 1895.

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Abrading materials and tools.	Grinding and Polishing....	336	27	Annunciators—	Electric Signaling.....	33	16
Absorbent.....	Driers.....	12	28	Time.....	Signals.....	46	22
Accordions.....	Music.....	45	5	Annunciators.....	Railway Rolling-Stock.....	19	34
Accouterments.....	Accouterments.....	20	32	Anti-friction-wheels.....			
Accumulators.....	Pumps.....	19	9	(See Trucks.)			
Acids, mineral.....	Chemicals.....	146	6	Anti-induction devices.....	Telephony.....	101	16
Actinometers.....	Photography.....	3	6	Antiseptics.....	Preserving.....	182	6
Actions, organ.....	Music.....	65	5	Anvils.....	Metal-Forging.....	66	13
Address-printers.....	Printing.....	58	17	Apartment-houses.....	Masonry.....	29	4
Address-printers—				Apparatus.....	Chemicals.....	87	6
Strip forms.....	do.....	22	17	Apparatus.....	Composite Roofings and Cov- erings.....	68	15
Adhesives.....	Oils, Fats, and Glue.....	70	31	Apparatus.....	Fertilizers.....	48	6
Aerial navigation.....	Pneumatics.....	148	28	Apparatus.....	Hides, Skins, and Leather..	35	31
Agraffes and bridges.	Music.....	95	5	Apparatus.....	Mineral Oils.....	9	31
Piano.....				Apparatus.....	Preserving.....	141	6
Air.....	Beds.....	36	8	Apparatus—			
Air and gas pumps—				Reducing gravity.....	Mineral Oils.....	20	31
Hydraulic.....	Pneumatics.....	158	28	Apple-parers.....	Vegetable Cutters and Crush- ers.....	221	25
Mechanical.....	do.....	545	28				
Mercury.....	do.....	43	28	Applications, general....	Electricity. Special Appli- cations.....	6	16
Rotary.....	do.....	366	28				
Air-brushes.....	Painting.....	19	31	Apron vats and stretchers	Bleaching and Dyeing.....	43	6
Air-cooling apparatus.....	Refrigeration.....	156	28	Aquariums.....	Water-Distribution.....	16	9
Air-cooling apparatus—				Aqueducts.....	Hydraulic Engineering.....	9	4
Air-expansion.....	do.....	34	28	Arc and incandescent.....	Electric Lighting.....	29	16
Alarms.....	Electric Signaling.....	87	16	Arc and incandescent—			
Alarms—				Non-feeding.....	do.....	32	16
Aqueoreal.....	do.....	57	16	Arithmetic.....	Educational Appliances.....	73	31
Barokinetic.....	do.....	32		Armor-clad.....	Ships.....	100	22
Burglar.....	do.....	103	16	Arm-pit-shields.....	Apparel.....	69	24
Burglar, safe.....	do.....	44	16	Arms.....	Arms and Projectiles. Mak- ing.....	23	13
Alarms.....	Signals.....	136	22	Arms and hands.....	Artificial Limbs.....	36	20
Albums.....	Bookbinding.....	83	5	Article-delivery.....	Coin-Controlled Apparatus.....	32	14
Aligners.....	Type-Writing Machines.....	13	30	Article-delivery—			
Alloys.....	Metallurgy.....	250	3	Chance.....	do.....	10	14
Alphabet-blocks.....	Educational Appliances.....	40	31	Oscillatory.....	do.....	28	14
Altitude-instruments.....	Optics.....	35	30	Rotatory.....	do.....	59	14
Amalgamators—				Rotatory—			
Electric.....	Mills.....	48	25	Sheet-feed.....	do.....	30	14
Lead.....	do.....	51	25	Slidable pusher—			
Mercury.....	do.....	453	25	Coin-engaged.....	do.....	40	14
Plate.....	do.....	108	25	Detent.....	do.....	39	14
Vacuum.....	do.....	24	25	Detent and handle.....	do.....	56	14
Vapor.....	do.....	17	25	Spiral.....	do.....	9	14
Amphibulances and stretch- ers.....	Carriages and Wagons.....	34	10	Articles.....	Advertising.....	20	32
Ammonia.....	Ammonia, Water, and Wood- Distillation.....	50	31	Articles.....	Glass.....	107	15
Ammonia.....	Chemicals.....	55	6	Articles.....	Paper-Manufactures.....	85	17
Anchor.....	Ships.....	147	22	Articles—			
Anchor-trippers.....	do.....	41	22	Caoutchouc.....	Caoutchouc and Minor Plas- tics.....	151	15
Anemometers.....	Measuring-Instruments.....	8	23	do.....	do.....	59	15
Angle-irons.....	Metal-Rolling.....	0	13	Minor plastics.....	Advertising.....	17	32
Animal gates. Backwa- ter and.....	Sewerage.....	23	9	Multiple card.....	do.....	27	32
Animal-shears.....	Cutlery.....	293	13	Single card.....	Dentistry.....	32	21
Animal-stocks—				Articulators.....	Fuel.....	182	15
Gags and muzzles.....	Care of Live Stock.....	160	2	Artificial fuel.....			
Hog-traps.....	do.....	55	2	Artificial—			
Horse and cattle.....	do.....	80	2	Butter.....	Oils, Fats, and Glue.....	82	31
Sheep.....	do.....	57	2	Flowers.....	Fine Arts.....	88	15
Annealing apparatus.....	Annealing and Tempering..	32	3	Ivory.....	Caoutchouc and Minor Plas- tics.....	17	5
Annealing apparatus—				Stone, lime, and cement, composition.....	Artificial Stone, Lime, and Cement.....	460	15
Boxes and pots.....	do.....	33	3	Artists' appliances.....	Fine Arts.....	84	5
Clamps.....	do.....	23	3	Ash-chutes.....	Masonry.....	14	4
Muffles.....	do.....	28	3	Ash-pans.....	Steam-Boiler Furnaces.....	67	18
Ovens.....	do.....	23	3	Assaying.....	Metalurgy.....	13	3
Ovens—				Assorting.....	Silk.....	6	21
Rotary hearths.....	do.....	7	3	Astronomy.....	Educational Appliances.....	74	31
Pits.....	do.....	9	3	Atomizers.....	Surgery.....	152	6
Wire and springs.....	do.....	23	3	Attaching card-clothing.....	Wire-Working.....	13	14
Annealing processes.....	do.....	23	3	Attachment-holders.....	Sewing-Machines.....	59	24
Annealing processes—				Attachments.....	Plows.....	69	1
Drawing temper.....	do.....	27	3	Attachments.....	Pumps.....	157	9
Gas.....	do.....	15	3	Attachments.....	Steam-Boiler Furnaces.....	59	18
Toughening.....	do.....	10	3	Attachments.....	Steam-Boilers.....	168	18
Annunciators.....	Electric Signaling.....	52	16	Attachments.....	Steam-Engines.....	156	18
Annunciators—				Attachments.....	Type-Writing Machines.....	13	30
Drop.....	do.....	141	16	Attachments—			
Drop system.....	do.....	64	16	Hand, exercising de- vices.....	Music.....	7	5
Step-by-step.....	do.....	91	16				

SUB-CLASSES ALPHABETICALLY ARRANGED.

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Attachments—				Bag-machines—			
Harrow	Plows	69	1	Tube openers and clos-			
Keyheard, exercising	Music	17	5	ers—			
Reed-organ	do	15	5	Openers—	Paper-Manufacturing	6	17
Watch-chain	Jewelry	84	5	Roll	do	4	17
Andiphones	Acoustics	9	23	Side	do	11	17
Anger-handles	Woodworking-Tools	62	29	Tube-openers			
Anger-handles—				Tube-openers—			
Ratchet	do	14	29	Openers—			
Augers	Tools and Implementa.	83	13	Roll	do	6	17
	Making			Side	do	8	17
Augers	Woodworking-Tools	136	29	Bags	Packing and Storing Vessels	33	32
Augers—				Bags, traveling	Baggage	60	32
Countersink	do	89	29	Bag-turning machines	Weaving	7	21
Detachable-lip	do	39	29	Balance-escapements	Horology	128	23
Expansible	do	46	29	Balanced slide	Steam-Engine Valves	335	18
Gage attachments	do	24	29	Balanced slide—			
Autographic registers	Printing	77	17	Double	do	63	18
Autoharps	Music	19	5	Roller	do	54	18
Automatic	Railway-Brakes	123	34	Balances	Measuring-Instruments	164	23
Automatic	Telegraphy	257	16	Balances—			
Automatic—				Electrical attachments	do	24	23
Draw-bar actuated	Railway-Brakes	156	34	Equal arms	do	57	23
Draw-bar actuated—				Pick-up weights	do	26	23
Centrifugal governor	do	40	34	Recording	do	24	23
Winding	do	48	34	Bale and box hooks	Hoisting	12	12
Push-rod actuated	do	103	34	Ballasting	Ships	28	22
Push-rod actuated—				Bailing-heads	Carding	12	21
Winding	do	27	34	Ballot-boxes	Packing and Storing Vessels	10	32
Regulators	Wind-Wheels	112	28	Ballot-boxes—			
Spindle-lathes	Wood-Turning	58	29	Ball	do	8	32
Auxiliary pedals	Music	33	5	Canceling	do	4	32
Auxiliary strings	do	13	5	Closures	do	11	32
Awings	Curtains, Shades, and Screens	256	8	Balls	Cordage	8	21
Awings	Railway Rolling-Stock	6	34	Balls and hats	Games and Toys	95	7
Axles				Ball-traps	Firearms	98	22
Axles and hatchets	Tools and Implementa.	109	13	Bandages	Surgery	140	6
	Making			Bandages—			
Axle-boxes	Carriages and Wagons	130	10	Bandage-machines	do	7	6
Axle-gages	Wheelwright-Machines	49	29	Suspensory	do	40	6
Axle-skins	Carriages and Wagons	121	10	Water	do	20	6
Axles	do	325	10	Band-cutters and feeders	Thrashing	358	25
Axles	Railway Rolling-Stock	38	34	Banding	Cordage	14	21
Axles—				Band-saw	Wood-Sawing	215	29
Divided, fixed middle	do	22	34	Banjos and guitars	Music	146	5
bearings				Bank-notes, checks, and	Bookbinding	67	5
With couplings	do	87	34	bonds			
Lubricating	Journal-Boxes, Pulleys, and	123	12	Banners and flags	Fine Arts	11	5
	Shafting			Bar	Matrix-Making	6	30
Wheel-attaching de-	Railway Rolling-Stock	70	34	Bar, type-writing	Type-Writing Machines	308	30
vices				Barbing	Wire-Working	159	14
With sleeved and fixed	do	44	34	Barbing—			
wheels				Sheet-metal	do	33	14
Baby-jumpers	Surgery	68	6	Tools	do	18	14
Baby-walkers	do	59	6	Bar-machines—			
Backwater and animal	Sewerage	23	9	Plural	Linotyping	10	30
gates				Single	do	14	30
Badges	Fine Arts	24	5	Barometers	Measuring-Instruments	29	23
Baffles and screens	Driers	3	28	Barrel-head making	Coopering	60	29
Bag and twine holders	Store-Furniture	40	8	Barrel-hoop machines	do	65	29
Bag-closures	Packing and Storing Vessels	46	32	Barrel-making machines	do	111	29
Bag-closures—				Barrel-rollers	Hoisting	30	12
Bar	do	18	32	Barrel-washers	Washing Apparatus	50	27
Bag-fasteners	do	32	32	Barrels	Packing and Storing Vessels	38	32
Bag-fasteners—				(See Paper vessels, bar-			
Cord-tie	do	17	32	rels.)			
Hinged-jaw	do	21	32	Barrels—			
Locking-lever	do	17	32	Wooden	do	93	32
Strap	do	11	32	(See Wooden barrels.)			
Baggage-checks	Clasps, Buckles, and Buttons	75	11	Bars	Metal-Drawing	37	13
Bag-holders, bagging	Mills	340	25	Bascule-bridges	Bridges	11	4
grain				Base-ball	Games and Toys	9	7
Bag-holders	Store-Furniture	38	8	Base key and ratchet	Nut and Bolt Locks	305	14
Bag-machines	Paper-Manufacturing	40	17	Base-washer	do	180	14
Bag-machines—				Basins and stands	Baths and Closets	335	9
Blank-formers	do	26	17	Basket-making machines	Coopering	32	29
Transverse central-	do	22	17	Baskets	Packing and Storing Vessels	160	32
folders				(See Wooden vessels,			
Triangular folders	do	7	17	baskets.)	do	33	32
Tube-closers	do	31	17	Baskets and buckets,			
Tube-formers	do	39	17	(cloth, leather, and rub-			
Tube formers and clos-	do	44	17	ber.)			
ers				Baskets and crates	do	45	32
Tube formers and open-	do	3	17	(See Metallic vessels,			
ers				baskets and crates.)			
Tube formers, openers,	do	24	17	Bathing apparatus	Baths and Closets	326	9
and closers				Bathometers	Measuring-Instruments	42	23
Tube formers, openers,				Baths	Electricity, Medical and	41	26
and closers—					Surgical		
Openers—				Baths	Photography	13	6
Roll	do	11	17	Bating	Hides, Skins, and Leather	30	31
Side	do	5	17	Battening	Rouing	62	29
Tube openers and clos-	do	34	17	Batteries—			
ers				Anodes	Electro-Chemistry		3
				Cathodes	do		3

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Batteries—				Bedsteads—			
Connectors	Electro-Chemistry	3	3	Sofa—			
Diaphragms	do	3	3	Folding back and seat	Beds	59	8
Earth	do	3	3	Folding-seat	do	137	8
Gas	do	3	3	Rotary back and seat	do	14	5
One-fluid	do	3	3	Vertically-moving	do	44	8
One-fluid—				frame.	do		
Zinc	do	3	3	Table	do	48	8
Zinc—				Wardrobe-bedsteads	do	45	8
Chlorides	do	3	3	Wardrobe-bedsteads—			
Chromates	do	3	3	Center-folding	do	80	8
Nitrates	do	3	3	End-folding	do	55	8
Oxides	do	3	3	Extension	do	30	8
Sulphates	do	3	3	Shifting-fulcrum	do	90	8
Piles	do	3	3	Single-frame	do	285	8
Secondary	do	525	3	Sliding-frame	do	14	8
Secondary—				Bee-culture—			
Charging and dis-	do	85	3	Beehives	Bee-Culture	863	2
charging				Hive appliances	do	135	2
Thermal	Electricity. Generation	46	26	Beer	Alcohol	8	31
Two-fluid	Electro-Chemistry	3	3	Beer—			
Two-fluid—				Coolers	Refrigeration	344	28
Zinc	do	46	3	Dispensing	Packaging and Dispensing	15	32
Zinc—					Liquids.		
Chromates	do	53	3	Dispensing—			
Nitrates	do	42	3	Barrel-taps	do	37	32
Sulphates	do	18	3	Faucet—			
Sulphates—				Foam	do	27	32
Gravity	do	60	3	Pump	do	16	32
Vessels	do	3	3	Faucets	do	8	32
Bayonets	Firearms	22	22	Foam-separators	do	24	32
Beam-compasses	Drafting	74	23	Pipe-cleaners	do	9	32
Beams	Plows	57	1	Pressure	do	38	32
Beams	Railway-Brakes	95	34	Pressure—			
Beam-harvesters	Harvesters	20	7	Gas	do	17	32
Bearings	Railway Rolling-Stock	34	34	Pump	do	56	32
(See Trucks.)				Preserving	Alcohol	17	31
Bearings	Velocipedes	65	7	Preserving—			
Bed and cylinder ma-	Printing	109	17	Pasteurizing	Alcohol	20	31
chines				Purifying	do	24	31
Bed and cylinder ma-				Purifying—			
chines—				Finings and shavings	do	20	31
Cushions	do	48	17	Beetling	Cloth-Finishing	3	21
Maltirevolution	do	17	17	Bell-cord hangers	Railway Rolling-Stock	6	34
Maltirevolution—				(See Cars.)			
Perfecting	do	17	17	Bell-hanging	Signals	33	22
Oscillating-cylinder	do	28	17	Bell-hanging—			
Oscillating-cylinder—				Pulls	do	28	22
Perfecting	do	10	17	Ringing	do	42	22
Perfecting	do	24	17	Bellows	Pneumatics	88	28
Stop-cylinder	do	40	17	Bellows—			
Stop-cylinder—				Organ	Music	48	5
Perfecting	do	5	17	Bell-ringer	Steam-Engines	29	18
Traveling-cylinder	do	47	17	Bells	Electric Signaling	166	16
Traveling-cylinder—				Bells	Signals	134	22
Perfecting	do	11	17	Belt-fasteners	Hose and Belting	275	11
Bed and platen machines	do	25	17	Belting	do	180	11
Bed and platen ma-				Belting-machines	do	42	11
chines—				Belt-shifters	Journal-Boxes, Pulleys, and	277	12
Inking attachment	do	19	17		Shafting		
Oscillating	do	72	17	Belt-stretchers	Hose and Belting	175	11
Oscillating—				Belt-tighteners	Journal-Boxes, Pulleys, and	157	12
Roller and plate inker	do	78	17	Bench-dogs	Shafting		
Roller-inker	do	47	17	Bench-planes	Woodworking-Tools	84	29
Roller-inker—				Bench-planes—	do	256	29
Orbital	do	14	17	Bit-adjusting	do	107	29
Stationary roller-	do	17	17	Crozes	do	23	29
inker				Gage attachments	do	93	29
Roller and plate inker	do	26	17	Bending	Metal-Bending	117	14
Roller-inker	do	56	17	Bending	Wire-Working	135	14
Tympan-gages	do	58	17	Bending and coiling	do	15	14
Web	do	27	17	Bending and twisting	do	65	14
Bed-bottom	Fire Escapes and Ladders	17	4	Bending—			
Bed-bottoms—				By press	Metal-Bending	46	14
Fabrics	Beds	330	8	By rolls	do	27	14
Fabrics and springs	do	110	8	Bending wood	Woodworking-Machines	269	29
Slats	do	55	8	Bent seam	Metal-Tube Manufacture	21	13
Slats and springs	do	745	8	Berths	Railway Rolling-Stock	34	34
Springs	do	452	8	(See Cars, sleeping.)			
Bed-clothing	do	16	8	Berths, cabins, and furni-	Ships	118	22
Bed-pans	Baths and Closets	46	9	ture.			
Bedsteads	Beds	106	8	Bevel-ended, non-tele-	Railway Rolling-Stock	9	34
Bedsteads—				scoping.			
Attachments	do	23	8	Bevels	Measuring-Instruments	164	23
Braces	do	43	8	Beverages	Carbonating Beverages	20	32
Extension	do	25	8	Bicycle attachments	Railway Rolling-Stock	6	34
Folding	do	86	8	(See Velocipedes.)			
Invalid	do	165	8	Bicycle-lamps	Lamps and Gas-Fittings	24	30
Invalid—				Bicycles—			
Head-sections	do	87	8	Header-preventers	Velocipedes	8	7
Lifters and conveyers	do	29	8	Ordinary, rigid-frame	do	32	7
Vertically-moving	do	54	8	Propulsion—			
frame.				Crank and chain	do	105	7
Sofa	do	72	8	Crank and gear	do	113	7
Sofa—				Lever and crank	do	28	7
Extension	do	54	8	Lever and ratchet	do	57	7
Folding-back	do	114	8				

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Bicycles—				Boiler-coverings	Composite Roofings and Cov- erings.	246	15
Propulsion—				Boiler feeders. Steam-	Steam-Boilers	600	18
Lever, crank and gear, or chain.	Velocipedes	20	7	Boilers—			
Lever, ratchet and gear, or chain.	do	15	7	Agricultural	Stoves and Furnaces	283	19
Miscellaneous	do	9	7	Domestic—	do	414	19
Rack and pinion	do	17	7	Steamers	do	307	19
Safety—				Stand	do	149	19
Rigid-frame	do	80	7	Steam, sectional	Steam-Boilers	532	18
Spring-frame	do	164	7	Bolsters	Railway Rolling-Stock	28	34
Supports	do	107	7	(See Trucks.)			
Tandem	do	20	7	Bolt-holders	Metal-Working Tools	27	14
Biers	Undertaking	25	20	Bolts	Builders' Hardware	8	20
Bilge-water, discharg- ing.	Ships	66	22	Bolts and nuts, dressing and assembling.	Metal Bolts, Nuts, Rivets, and Screws.	60	13
Billet-loops	Harness	50	11	Bolts and rivets	do	156	13
Bill-files	Stationery	166	5	Bolts and rivets— Making	do	362	13
Bill-files—				Bo'ts—			
Boxes	do	25	5	Can	Builders' Hardware	5	20
Boxes—				Double-door	do	31	20
Separators	do	53	5	Jail-boltwork	do	20	20
Continuous-web	do	8	5	Multiple	do	35	20
Division leaves and pockets.	do	28	5	Operators	do	10	20
Followers	do	165	5	Sliding	do	137	20
Impaling-pins	do	117	5	Sliding and rotary	do	34	20
Packet-holders	do	50	5	Bomb-lances	Projectiles	66	22
Pins and followers	do	10	5	Bonding and tying	Masonry	53	4
Billiard—				Bonds, bank-notes, and checks.	Bookbinding	67	5
Appliances	Games and Toys	80	7	Bone-black	Sugar and Salt	119	6
Balls	do	9	7	Bonnets	Apparel	40	24
Chalk-cups	do	56	7	Bonnets and covers	Harness	100	11
Cues	do	67	7	Book and music holders—			
Cone-tip fasteners	do	19	7	Base supported	Furniture	71	8
Cushions	do	84	7	Base-supported—			
Table-levelers	do	42	7	Adjustable	do	29	8
Tables	do	117	7	Rotary	do	7	8
Binders	Sewing-Machines	87	24	Body-supported	do	5	8
Binders—				Book-stands	do	23	8
Compressors	Harvesters	36	7	Book-stands—			
Grain-adjusters	do	100	7	Folding	do	39	8
Sheaf-carriers	do	132	7	Leveling	do	19	8
Temporary	Bookbinding	589	5	Bracket-supported	do	68	8
Binding	do	104	5	Bracket-supported—			
Binding-machines	do	124	5	Adjustable	do	54	8
Birds	Store-Furniture	49	8	Leaf-holders	do	56	8
Bird cages and houses	Care of Live Stock	191	2	Leaf-rests	do	13	8
Bits	Metal Boring and Drilling	96	13	Music-stands	do	13	8
Bit-sockets	Woodworking-Tools	188	29	Music-stands—			
Bit-stocks	do	75	29	Portable	do	40	8
Bit-stocks—				Panel	do	56	8
Ratchet	do	63	29	Portfolio	do	40	8
Blackboard-rubbers	Stationery	124	5	Book-cases	do	22	8
Blackboards	Educational Appliances	75	31	Book-cases—			
Blackening box and brush cases.	Brushing and Scrubbing	22	27	Adjustable shelf-parti- tions.	do	32	8
Blackening-boxes	Packing and Storing Vessels	45	32	Adjustable shelves and shelf-supports.	do	85	8
(See Metallic vessels, blackening-boxes.)				Hanging shelves	do	9	8
Blackening-box holders	Brushing and Scrubbing	36	27	Knockdown	do	14	8
Blackening	Trees, Plants, and Flowers	7	1	Revolving	do	53	8
Blanket	Fire Escapes and Ladders	35	4	Roller-shelves	do	24	8
Blasting-cartridges	Projectiles	70	22	Book-clamps	Baggage	39	32
Blasting-fuses	do	84	22	Book-cover protectors	Bookbinding	68	5
Blasting implements	do	51	22	Book-cutting	do	32	5
Blasting-powder	Explosives	114	6	Book-leaf holders and marks.	do	96	5
Bleaching	Bleaching and Dyeing	77	6	Book-marks and book-leaf holders.	do	75	5
Bleaching	Paper-Making	51	15	Books and binding	do	182	5
Bleaching cane-juice	Sugar and Salt	38	6	Books and covers	Sewing-Machines	83	24
Blind-stops	Builders' Hardware	177	20	Book-sewing	Bookbinding	175	5
Block and tackle	Holisting	269	12	Book-stapling	Coin-Controlled Apparatus	2	14
Block and tackle—				Book-blackening	Brushing and Scrubbing	59	27
Differential pulleys	do	130	12	Book-blackening machines	do	68	27
Block-signals, automatic	Railways	48	4	Boot-clearers	Boots and Shoes	120	11
Blocks, musical	Music	8	5	Boots	Carriages and Wagons	59	10
Blotters	Stationery	110	5	Boots and aprons	Grinding and Polishing	94	27
Blowpipes	Metallurgy	75	3	Boots and shoes	Boots and Shoes	40	11
Boards, drawing	Fine Arts	92	5	Boot-treating machines	do	175	11
Boat-building	Boats	98	22	Boring	Woodworking-Machines	210	29
(See Building.)				Boring and drilling appli- ances.	Metal Boring and Drilling	14	13
Boats—				Boring and reaming	Woodworking-Machines	11	29
Life	do	268	22	Boring hubs	Wheelwright-Machines	112	29
(See Life boats and rafts.)				Boring machines	Metal Boring and Drilling	83	13
Sectional and folding	do	78	22	Boring, portable	Woodworking-Machines	101	29
Boffin and cop builders	Spinning	21	21	Bosom-boards	Laundry	127	27
Bobbins	do	162	21	Bottle and can washers	Washing Apparatus	177	27
Bobbin-supporters	do	47	21	Bottle cases. Can and (See Wooden boxes, can and bottle cases.)	Packing and Storing Vessels	93	32
Bodies	Carriages and Wagons	253	10	Bottles and jugs	do	77	32
Body structure	Ordnance	111	22				
Body-wear	Electricity. Medical and Surgical	193	26				
Bogies	Railway Rolling-Stock		34				
(See Locomotives and trucks.)							
Boiler attachments.	Steam-Boilers	168	18				
Steam-							

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Bows and cross-bows....	Firearms.....	36	22	Bridges and agraffes. Pi- ano	Music.....	95	5
Bows. Violin.....	Music.....	21	5	Bridges—			
Boxes, (cloth, leather, and rubber.)	Packing and Storing Vessels	21	32	Arch.....	Bridges.....	16	4
Boxes.....	do.....	88	32	Bowstring.....	do.....	66	4
(See Metallic vessels, boxes.)				Draw.....	do.....	25	4
Boxes—				Draw—			
Paper.....	do.....		32	Bascule.....	do.....	11	4
(See Paper vessels, boxes, angular and and curved.)				Gates.....	do.....	197	4
Post-office.....	Stationery.....	82	5	Lift.....	do.....	10	4
Wooden.....	Packing and Storing Vessels	67	32	Swing.....	do.....	49	4
(See Wooden boxes.)				Ferry-guards.....	do.....	8	4
Box-fasteners.....	Locks and Latches.....	65	20	Floating.....	do.....	19	4
Box-fasteners—				Flooring.....	do.....	5	4
Seal.....	do.....	25	20	Piers.....	do.....	53	4
Sliding-bolt.....	do.....	9	20	Suspension.....	do.....	62	4
Spring-catch.....	do.....	83	20	Truss.....	do.....	426	4
Box-machines.....	Coopering.....	16	29	Violin.....	Music.....	26	5
Box-nailing machines.....	Paper-Manufactures.....	310	17	Bridgework.....	Dentistry.....	25	20
Box-openers.....	Woodworking-Machines.....	104	29	Bridle-bits.....	Harness.....	375	11
Box-scrappers.....	Woodworking-Tools.....	42	29	Bridles and halters.....	do.....	600	11
Bracelets.....	Jewelry.....	277	5	Broadcast.....	Seeders and Planters.....	607	1
Bracket-lamps.....	Lamps and Gas-Fittings.....	35	30	Broadcast—			
Brackets—				Hand.....	do.....	109	1
Arm-supporting.....	Furniture.....	59	8	Revolving boppers.....	do.....	23	1
Arm-supporting—				Walking.....	do.....	11	1
Adjustable.....	do.....	12	8	Bronzing-machines.....	Paper-Making.....	87	15
End-supporting.....	do.....	195	8	Brooches.....	Jewelry.....	154	5
End-supporting—				Broom-machines.....	Brushing and Scrubbing.....	49	27
Adjustable.....	do.....	79	8	Broom-sewing.....	Sewing-Machines.....	14	24
Braiders and corders.....	Sewing-Machines.....	93	24	Brooms—			
Braiding.....	Cordage.....	115	21	Broom-heads.....	Brushing and Scrubbing.....	174	27
Braiding—				Household.....	do.....	74	27
Carriers.....	do.....	23	21	Stable and yard.....	do.....	23	27
Braids.....	do.....	20	21	Whisk.....	do.....	25	27
Brake-flange on wheel....	Railway-Brakes.....	11	34	Brush and broom bridles.....	do.....	77	27
Brake-handles.....	do.....		34	Brush and broom handles.....	do.....	90	27
(See Hand levers and staffs.)				Brush and broom sup- ports.....	do.....	43	27
Brake-levers.....	Carriages and Wagons.....	131	10	Brush-cleaners.....	do.....	3	27
Brakes.....	do.....	383	10	Brushes or rolls—			
Brakes.....	Pumps.....	102	9	Fixed.....	Painting.....	54	31
Brakes.....	Railway-Brakes.....	374	34	Reciprocating.....	do.....	17	31
Brakes.....	Velocipedes.....	67	7	Brush heads and faces—			
Brakes—				Bath and flesh brushes.....	Brushing and Scrubbing.....	23	27
Automatic.....	Carriages and Wagons.....	434	10	Brush and broom fiber.....	do.....	24	27
Brake-shoes.....	do.....	77	10	Dusting-brushes.....	do.....	74	27
Brake-shoes.....	Railway-Brakes.....	10	34	Hair-brushes.....	do.....	42	27
Brake-shoes—				Hat and clothes brushes.....	do.....	23	27
Chills.....	do.....	11	34	Horse-brushes.....	do.....	26	27
Composite faces.....	do.....	29	34	Metal-cleaning brushes.....	do.....	12	27
Fasteners.....	do.....	134	34	Metallic tuft-fasteners.....	do.....	17	27
Non-metallic.....	do.....	8	34	Molds and molded backs.....	do.....	12	27
Rail.....	do.....	5	34	Nail-brushes.....	do.....	2	27
Recessed faces.....	do.....	23	34	Paint and whitewash brushes.....	do.....	190	27
Branding-stamps.....	Printing.....	79	17	Rotary brushes.....	do.....	56	27
Bread and cracker ma- chines.....	Bread, Cracker, and Lozenge Making.....	269	15	Scrubbers.....	do.....	70	27
Break-water.....	Hydraulic Engineering.....	19	14	Shaving-brushes.....	do.....	13	27
Breast-pumps.....	Surgery.....	33	6	Tooth-brushes.....	do.....	48	27
Breast-strap slides.....	Harness.....	100	11	Brush-machines.....	do.....	96	27
Breech-loading.....	Ordnance.....	121	22	Brush-trimming ma- chines.....	do.....	17	27
Breech-loading—				Buckles.....	Clasps, Buckles, and Buttons.....	1500	11
Gas-operated.....	do.....	7	22	Buckles and snap-hooks combined.....	do.....	75	11
Recoil-operated.....	do.....	25	22	Buckles, personal wear.....	do.....	450	11
Brick and tile cutters.....	Clay and Pottery.....	115	15	Buffere.....	Railway Draft Appliances.....	105	34
Brick-kilns—				Buffers.....	Railways.....	49	4
Continuous.....	do.....	77	15	Buffers, fluid-pressure.....	Railway Draft Appliances.....	10	34
Continuous—				Builders' hardware.....	Hardware-Making.....	71	13
Tunnels.....	do.....	85	15	Building.....	Boats.....	98	22
Downdraft.....	do.....	80	15	Building.....	Ships.....	228	22
Furnaces.....	do.....	59	15	Building-blocks, toy.....	Games and Toys.....	128	7
Reversible-draft.....	do.....	26	15	Buildings.....	Iron Structures.....	82	4
Updraft.....	do.....	156	15	Bullets and shot.....	Arms and Projectiles. Mak- ing.....	42	13
Vertical.....	do.....	17	15	Bumpers, rigid.....	Railway Draft Appliances.....	6	34
Brick-machines—				Bunching-machines.....	Vegetable Cutters and Crush- ers.....	7	25
Hydraulic.....	do.....	17	15	Buoyant propellers.....	Marine Propulsion.....	50	22
Reciprocating.....	do.....	422	15	Boys and safes.....	Boats.....	47	22
Rotary.....	do.....			Bureaus.....	Furniture.....	20	8
Horizontal.....	do.....	106	15	Bureaus, knockdown.....	do.....	17	8
Vertical.....	do.....	101	15	Burglar-alarms—			
Screw.....	do.....	240	15	Combined.....	Signals.....	57	22
Traveling molds.....	do.....	76	15	Detonating.....	do.....	191	22
Brick-making imple- ments.....	do.....	59	15	Miscellaneous.....	do.....	19	22
Brick-molds.....	do.....	192	15	Ringing.....	do.....	299	22
Brick-molds—				Burglar-proof.....	Railway Rolling-Stock.....	30	34
Sanders.....	do.....	43	15	(See Cars, express.)			
Bricks.....	Masonry.....	30	4	Burglar-proof.....	Safes.....	166	20
Brick settings. Stone and.....	do.....	133	15	Burial apparatus.....	Undertaking.....	9	20
Bridge-guards.....	Railways.....	8	4	Burial apparatus—			
Bridge-irons.....	Hardware-Making.....	99	13	Grave-fillers.....	do.....	10	20

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Burlal apparatus—				Cannon and ball	Arms and Projectiles. Mak- ing	64	13
Raising and lowering ..	Undertaking	42	20	Can-openers	Cutlery	178	13
Burners—				Canopy shades and re- flectors.	Lamps and Gas-Fittings	147	30
Hay and straw	Stoves and Furnaces	72	19	Cant-dogs	Woodworking-Tools	70	29
Refuse	do	83	19	Canteens and flasks	Baggage	32	32
Burnishing	Boots and Shoes	400	11	Canvas-stretchers	Fine Arts	40	5
Burnishing	Photography	61	6	Cap-boxes	Projectiles	22	22
Burnishing	Sheet-Metal Ware. Making	46	14	Capes and shawls	Apparel	35	24
Burring	Carding	71	21	Cap-filling	Projectiles	15	22
Burrs and sinkers	Knitting and Netting	44	21	Capping-machines	Packaging and Dispensing Liquids.	33	32
Bushings	Railway Rolling-Stock	6	34				
(See Wheels.)				Capping-machines—			
Bustles	Crinoline and Corsets	266	24	Hand-tools	do	7	32
Butchers' stalls	Butchering	3	25	Magazine-feed	do	15	32
Butter and cheese cutters ..	Dairy	105	2	Capping screws and nails ..	Metal Bolts, Nuts, Rivets, and Screws.	42	13
Butter and cheese. Manu- facture of	do	33	2				
Butter workers and molds ..	do	382	2	Capstans and windlasses ..	Hoisting	78	12
Buttons	Clasps, Buckles, and Buttons ..	70	11	Capstans and windlasses—			
Button-fasteners	do	450	11	Capstans	do	76	12
Buttonhole	Sewing-Machines	521	24	Drum and clutch	do	58	12
Buttonhole-cutters	Cutlery	100	13	Hand-crank operated	do	127	12
Button machines and dies ..	Caoutchouc and Minor Plas- tics.	35	15	Lever-operated	Elevators	104	12
Button-making machines ..	Clasps, Buckles, and Buttons ..	150	11	Steam-winch	Hoisting	26	12
Buttons	do	750	11	Sweep-operated	do	49	12
Buttons—				Wild-cats	do	18	12
Hinged shoe	do	450	11	Windlass with capstan	do	47	12
Separable	do	300	11	Capsule-machines	Surgery	95	6
Buttons and clasps	Metal Personal Wear. Mak- ing	61	14	Capsules	Medicines	14	6
				Car	Roofing	96	29
Button-setting machines ..	do	200	11	Car and locomotive irons ..	Wagon, Car, and Track Irons ..	128	13
Button-setting tools	do	200	11	Car axles and boxes	do	50	13
Buzzer and whirligigs	Games and Toys	116	7	Making			
Cab-door openers	Feuces	14	1	Carbonators	Carbonating Beverages	14	32
Cabinets	Store-Furniture	2	8	Carbonators—			
Cabinets—				Beer	do	14	32
Delivering	do	46	8	Beer—			
Grocers'	do	13	8	Atomizer	do	16	32
Spool	do	33	8	Pressore	do	12	32
Cable-laying	Hydraulic Engineering	17	4	Pump	do	12	32
Cables and cable-stoppers ..	Ships	38	22	Rotary mixer	do	15	32
Caissons	Hydraulic Engineering	26	4	Spray	do	25	32
Caissons, ship	do	14	4	Carbonators and genera- tors.	do	10	32
Cake-cutters	Bread, Cracker, and Lozenge Making.	41	15	Carbonators and genera- tors—			
				Portable	do	18	32
Cake-turners	Kitchen and Table Articles ..	2	8	Carbon compounds	Chemicals	170	6
Calculators	Measuring-Instruments	274	23	Carbon dyes	Bleaching and Dyeing	676	6
Calculators—				Carbonetors	Gas	502	31
Tabular	do	138	23	Carburetors—			
Calendars	Stationery	131	5	Carbureting-lamps	do	105	31
Calendars—				Float-vaporizers	do	52	31
Continuous-web	do	31	5	Gas and air mixers	do	52	31
Disk	do	71	5	Jet-mixers	do	94	31
Roller	do	28	5	Oil-feed			
Calendering	Cloth-Finishing	8	21	Float-valves	do	45	31
Calendering	Paper-Making	119	15	Rotary	do	26	31
Calipers and dividers	Drafting	208	23	Revolving	do	71	31
Calipers—				Card-clothing	Carding	31	21
Dial	Measuring-Instruments	43	23	Card-exhibitors	Advertising	65	32
Stem	do	14	23	Card-exhibitors—			
Calks	Farriery	79	14	Droppers	do	70	32
Calk-sharpener	do	28	14	Rotary	do	50	32
Call-bells	Signals	69	22	Sliding	do	30	32
Calls	Telephony	63	16	Carding	Carding	173	21
Calls—							
Reed	do	24	16	Car-door openers	Fences	36	1
Step-by-step	do	138	16				
Strength and polarity	do	33	16	Card racks	Advertising	50	32
Camels and floating docks ..	Ships	38	22	Card-movers	Railway Rolling-Stock	10	34
Cameras	Photography	209	6	Car-movers—			
Cameras—				Flange or axle grip	do	40	34
Magazine	do	93	6	Pinch-bars	do	17	34
Panoramic	do	14	6	Pinch-bars—			
Camera-stands	do	52	6	With rail-grip	do	33	34
Camp	Beds	179	8	Pushing-jacks	do	49	34
Camp and lunch kits	Baggage	88	32	Traction-wheels	do	12	34
Cams and eccentrics	Machine Elements	181	12	Carpet-cleaners	Brushing and Scrubbing ..	149	27
Canals	Hydraulic Engineering	29	4	Carpet-fasteners	Builders' Hardware	17	20
Canals—				Carpet-fasteners—			
Gates, bear-trap	do	22	4	Clasp	do	17	20
Gate-valves	do	22	4	Moldings	do	40	20
Lock-gates	do	40	4	Strips	do	31	20
Can and bottle cases	Packing and Storing Vessels ..	93	32	Tack-fasteners	do	31	20
(See Wooden boxes, can and bottle cases.)				Carpet-lining	Paper-Making	145	15
Candle apparatus	Oils, Fats, and Glue	80	31	Carpet-rag loopers	Weaving	25	21
Candles	do	53	31	Carpet-stretchers	Furniture	290	8
Candlesticks	Lamps and Gas-Fittings	157	30	Carpet stretchers and tackers.	do	81	8
Candlesticks—				Carpet-sweepers	Brushing and Scrubbing	236	27
Miners'	do	22	30	Car-platform door-open- ers.	Fences	39	1
Canes	Umbrellas and Canes	81	24	Car-replacers	Railways	177	4
Cane-strippers	Thrashing	64	25	Carriage—			
Canisters	Packing and Storing Vessels ..	118	32	Bow-setters	Wheelwright-Machines	16	29
(See Metallic vessels, canisters.)							

*Reissues.

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Carriage—				Cars—			
Clips and shackles.....	Wagon, Car, and Track Irons	62	13	Street—			
Irons.....	Carriages and Wagons.....	118	10	Convertible open and closed	Railway Rolling-Stock.....	28	34
Irons—				Hand- straps.....	do.....	14	34
Miscellaneous.....	Wagon, Car, and Track Irons	196	13	Reversible.....	do.....	7	34
Lamps.....	Lamps and Gas-Fittings.....	30	30	Storm-fronts.....	do.....	9	34
Carriages.....	Ordnance.....	35	22	Vestibule.....	do.....	93	34
Carriages.....	Type-Writing Machines.....	250	30	Car-signals.....	Signals.....	86	22
Carriers—				Cartridge—			
Elevated.....	Hoisting.....	116	12	Belts.....	Accouterments.....	35	32
Luggage.....	Velocipedes.....	7	7	Boxes.....	do.....	72	32
Store-service.....	Store-Service.....	17	12	Boxes—			
Cars—				Cartridge-feed.....	do.....	26	32
Bell-cord hangers.....	Railway Rolling-Stock.....	6	31	Feed-cases.....	Ordnance.....	29	22
Dining.....	do.....	5	34	Implements.....	Projectiles.....	244	22
Dumping.....	do.....	63	34	Loading.....	do.....	159	22
Dumping—				Cartridges.....	do.....	443	22
Convertible flat and hopper bottom	do.....	17	34	Cartridges and caps.....	Arms and Projectiles. Making	106	13
Hopper-bottom.....	do.....	54	34	Cartridges, electric.....	Projectiles.....	12	22
Inclined bottom, side doors.....	do.....	20	34	Car-wheels and tires.....	Wagon, Car, and Track Irons	117	13
Inwardly-tilting sections.....	do.....	15	34	Cases—			
Outwardly-tilting sections.....	do.....	16	34	Organ.....	Music.....	59	5
Outwardly-tilting sections—				Piano.....	do.....	72	5
Displaceable sides.....	do.....	16	34	Ticket.....	Stationery.....	140	5
Tilting body.....	do.....	30	34	Cash-registers.....	Measuring-Instruments.....	323	23
Tilting body.....	do.....	94	34	Cash-registers—			
Displaceable sides.....	do.....	30	34	Rotating indicators.....	do.....	227	23
Express, burglar-proof.....	do.....	31	34	Casing-heads.....	Artesian and Oil Wells.....	56	25
Floor-frames.....	do.....	161	34	Casks.....	Packing and Storing Vessels.....	66	32
Freight.....	do.....	39	34	(See Metallic vessels, casks.)			
Frames.....	do.....	12	34	Castanets.....	Music.....	10	5
Fruit.....	do.....	14	34	Casters.....	Builders' Hardware.....	193	20
Removable covers.....	do.....	12	34	Casters.....	Kitchen and Table Articles.....	73	8
Removable side sections.....	do.....	15	34	Casters—			
Rolling.....	do.....	6	34	Antifriction-rollers—			
Running boards and rails.....	do.....	13	34	Loose.....	Builders' Hardware.....	41	20
Stakes.....	do.....	21	34	Pivoted.....	do.....	66	20
Stakes—				Ball.....	do.....	26	20
Releasable.....	do.....	15	34	Ball—			
Side-folding.....	do.....	7	34	Antifriction-roller.....	do.....	39	20
Steps and platforms.....	do.....	11	34	Pivoted.....	do.....	14	20
Hand.....	do.....	64	34	Pintle-retainers.....	do.....	66	20
Hand—				Rotary.....	Kitchen and Table Articles.....	42	8
Geared.....	do.....	6	34	Sewing-machine.....	Builders' Hardware.....	76	20
Lamp arrangement.....	do.....	7	34	Spring.....	do.....	13	20
Merchandizing.....	do.....	10	34	Wheels.....	do.....	21	20
Open street—				Catamenial sacks.....	Surgery.....	60	6
Seats.....	do.....	11	34	Catapults.....	Firearms.....	68	22
Side-guards.....	do.....	13	34	Catching and holding tools.....	Care of Live Stock.....	53	2
Dust-guards.....	do.....	15	34	Cattle.....			
Emergency-exits.....	do.....	32	34	Cattle-guards, railway-gates.....	Pumps.....	57	9
Frames.....	do.....	37	34	Ceiling-blocks.....	Fences.....	103	1
Head-rests.....	do.....	7	34	Ceiling center-pieces.....	Electric Lighting.....	69	16
Individual safes.....	do.....	5	34	Ceiling and floor—	Carpentry.....	7	29
Platform-extensions with gates.....	do.....	8	34	Concrete.....	Fireproof Buildings.....	8	4
Platform-gates.....	do.....	21	34	Concrete and metal.....	do.....	80	4
Platforms.....	do.....	13	34	Metal.....	do.....	10	4
Seat and door arrangement.....	do.....	11	34	Protected wood.....	do.....	31	4
Steps.....	do.....	35	34	Tile.....	do.....	57	4
Steps—				Tile and metal.....	do.....	69	4
Extension, folding.....	do.....	28	34	Cells.....	Masonry.....	20	4
Extension, sliding.....	do.....	17	34	Celluloid.....	Caoutchouc and Minor Plastics.....	344	15
With gate.....	do.....	44	34	Cementation and case-hardening.....	Annealing and Tempering.....	15	3
Safety-bridges.....	do.....	271	34	Cementation and case-hardening—			
Sleeping.....				Compounds.....	do.....	71	3
Sleeping—				Gaseous.....	do.....	20	3
Berth-guards.....	do.....	8	34	Liquid.....	do.....	15	3
Berth-locks.....	do.....	7	34	Centerboards and keels.....	Ships.....	126	22
Compartment arrangement.....	do.....	15	34	Centerers.....	Metal Turning, Planing, and Milling.....	70	13
Convertible seat and berth.....	do.....	17	34	Centering.....	Masonry.....	25	4
Curtains and rods.....	do.....	9	34	Center-seals and by-pass valves.....	Gas.....	20	31
Hinged berths.....	do.....	14	31	Centrifugal creamers.....	Dairy.....	9	2
Ladders.....	do.....	10	34	Centrifugal machines.....	Sugar and Salt.....	278	6
Partitions.....	do.....	7	34	Centrifugal machines—			
Seat-back and upper berth.....	do.....	25	34	Honey-extractors.....	do.....	24	6
Suspended berths.....	do.....	9	34	Liquid-separators.....	do.....	102	6
Steam street.....	do.....	23	34	Testers.....	do.....	18	6
Street.....	do.....	52	34	Chafe-irons.....	Carriages and Wagons.....	62	10
Street—				Chain.....	Hydraulic Motors.....	62	9
Awnings.....	do.....	6	34	Chain.....	Pumps.....	236	9
				Chain and double chain.....	Sewing-Machines.....	349	24
				Chain and link making.....	Chains, Staples, and Horse-shoes.....	222	13
				Chain-grates.....	Steam-Boiler Furnaces.....	59	18
				Chain-propellers.....	Marine Propulsion.....	70	22
				Chains.....	Chains, Staples, and Horse-shoes.....	49	13

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Chains—				Chop-graders—			
Ornamental.....	Jewelry.....	166	5	*Flour processes.....	Mills.....	93	25
Chairs.....	Chairs.....	143	8	Gravity.....	do.....	112	25
Chairs.....	Coin-Controlled Apparatus.....	5	14	Rotary bolts.....	do.....	395	25
Chairs.....	Railways.....	225	4	Shaking bolts.....	do.....	421	25
Chairs—				Chopping-blocks.....	Butchering.....	15	25
Adjustable backs.....	Chairs.....	120	8	Christmas-tree lights.....	Lamps and Gas-Fittings.....	40	30
Adjustable backs and seats.....	do.....	46	8	Checks for rock-drills.....	Stone-Working.....	44	25
Attachments.....	do.....	50	8	Churns.....	Dairy.....	61	2
Backs and seats, independently-adjustable.....	do.....	48	8	Churns—			
Bottoms.....	do.....	156	8	Double-acting.....	do.....	122	2
Convertible.....	do.....	142	2	Reciprocating.....	do.....	17	2
Dentists'.....	do.....	130	8	Combined lever and crank mechanism.....	do.....		
Folding.....	do.....	353	8	Crank mechanism—			
Folding—				Multiple-dasher.....	do.....	98	2
Adjustable.....	do.....	131	8	Single-dasher.....	do.....	213	2
Invalid.....	do.....	21	8	Foot mechanism.....	do.....	8	2
Nursery.....	do.....	182	8	Hand and foot mechanism.....	do.....	9	2
Opera.....	do.....	111	8	Lever mechanism—			
Pads and feet.....	do.....	91	8	Multiple-dasher.....	do.....	37	2
Reclining.....	do.....	223	8	Single-dasher.....	do.....	103	2
Rocking.....	do.....	98	8	Rocking-seat mechanism.....	do.....	21	2
Rocking—				Without operating mechanism.....	do.....	282	2
Platform.....	do.....	193	8	Rotary—			
Step-ladder.....	do.....	35	8	Diagonal-dasher.....	do.....	16	2
Surgical.....	do.....	43	8	Horizontal double-dasher—			
Swinging.....	do.....	26	8	Concentric shafts.....	do.....	28	2
Tilting.....	do.....	164	8	Parallel shafts.....	do.....	30	2
Chairs and couches.....	Electricity, Medical and Surgical.....	17	26	Horizontal single-dasher.....	do.....	301	2
Chalk-line holders.....	Woodworking-Tools.....	27	29	Vertical double-dasher—			
Chandeliers, Gas.....	Lamps and Gas-Fittings.....	73	30	Concentric shafts.....	do.....	113	2
Change-receivers.....	Advertising.....	25	32	Parallel shafts.....	do.....	74	2
Channeling-machines.....	Boots and Shoes.....	100	11	Vertical single-dasher.....	do.....	337	2
Channeling-machines.....	Stone-Working.....	76	25	Vibrating.....	do.....	249	2
Charcoal—				Working body.....	do.....	443	2
Kilns.....	Charcoal and Coke.....	25	31	Chutes.....	Fire Escapes and Ladders.....	71	4
Processes.....	do.....	18	31	Chutes.....	Hoisting.....	170	12
Retorts.....	do.....	8	31	Chutes—	Hydraulic Engineering.....	25	4
Charts.....	Music.....	10	5	Screens.....	do.....	9	4
Charts—				Water-power.....	do.....	16	4
Harmony and transposition.....	do.....	38	5	Chute-wagons.....	Carriages and Wagons.....	99	10
Chases.....	Printing.....	43	17	Cigar and cigarette cutters.....	Tobacco.....	56	2
Check-books and terreta.....	Harness.....	200	11	Cigar-handling.....	do.....	29	2
Checking and unchecking.....	do.....	100	11	Cigar-cutters, tip.....	do.....	71	2
Check-punches.....	Printing.....	111	17	Cigar-lighting lamps.....	Lamps and Gas-Fittings.....	25	30
(See Hand-stamps, check-punches.)				Cigar-machine aprons.....	Tobacco.....	17	2
Check-row.....	Seeders and Planters.....	566	1	Cigar-machines.....	do.....	63	2
Checks, bank-notes, and bonds.....	Bookbinding.....	67	5	Cigar-machines—			
Checks—				Adjuncts.....	do.....	38	2
Escapement.....	Fire Escapes and Ladders.....	21	4	Apron.....	do.....	17	2
Fluid.....	do.....	21	4	Apron—			
Fly.....	do.....	10	4	Moving rolling-table.....	do.....	46	2
Governor.....	do.....	46	4	Stationary rolling-table.....	do.....	147	2
Check-valves.....	Water-Distribution.....	134	9	Endwise-moving filler.....	do.....	63	2
Cheese-hoops.....	Dairy.....	52	2	One traveling apron.....	do.....	53	2
Cheese-turners.....	do.....	15	2	Roller.....	do.....	78	2
Cheese-vats and curd-breakers.....	do.....	125	2	Two traveling aprons.....	do.....	10	2
Chenille.....	Weaving.....	13	21	Cigar-makers' implements.....	do.....	19	2
Chenille-machines.....	do.....	22	21	Cigar-makers' implements—			
Chest-protectors.....	Surgery.....	6	6	Wrapper-cutters.....	do.....	24	2
Children's carriages.....	Carriages and Wagons.....	295	10	Cigar-perforators.....	do.....	54	2
Children's carriages—				Cigars, cigarettes, and cartridges.....	do.....	74	2
Folding.....	do.....	79	10	Cigar supports and stands.....	do.....	48	2
Stops.....	do.....	52	10	Circuit-closers.....	Telegraphy.....	131	16
Children's seats.....	Velocipedes.....	28	7	Circuit-closers—			
Chills.....	Railway-Brakes.....	34	34	Burglar.....	do.....	50	16
(See Brake-shoes.)				Lock.....	do.....	28	16
Chimney-cleaners—				Retarded.....	do.....	21	16
Flue and stovepipe.....	Brushing and Scrubbing.....	65	27	Thermal.....	do.....	175	16
Lamp.....	do.....	79	27	Circuits and systems.....	do.....	159	16
Chimney-holders.....	Lamps and Gas-Fittings.....	33	30	Circular—			
Chimneys and cowl—				Circular machines.....	Knitting and Netting.....	85	21
Rotary.....	Pneumatics.....	189	28	Door.....	Safes.....	33	20
Stationary.....	do.....	443	28	Independent needles.....	Knitting and Netting.....	450	21
Chimneys—				Looper-pin and hook machines.....	do.....	35	21
Composite.....	Lamps and Gas-Fittings.....	94	30	Circular saw.....	Wood-Sawing.....	298	29
Double.....	do.....	5	30	Circular saw—			
Integral.....	do.....	73	30	Angular.....	do.....	88	29
Chin-rests, violin.....	Music.....	30	5	Fire-wood.....	do.....	47	29
Chisels.....	Woodworking-Tools.....	66	29	Radial.....	do.....	46	29
Chisels—							
Gage.....	do.....	17	29				
Chock-block.....	Railway-Brakes.....	34	34				
(See Wheel and rail.)							
Chop-graders—							
Bran-dusters—							
Beaters.....	Mills.....	148	25				
Brushes.....	do.....	62	25				
Electric purifiers.....	do.....	8	25				

* Approximate on account of number of cases without drawings.

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Circular saw—				Coal-oil—			
Traveling.....	Wood-Sawing.....	118	29	Retorts—			
Circulation.....	Steam-Boilers.....	236	18	Rotary.....	Mineral Oils.....	12	31
Circulation-machines.....	Linotyping.....	27	30	Coal, purifying.....	Fuel.....	10	15
Cisterns.....	Masonry.....	61	4	Coal-scintles.....	Packing and Storing Vessels.....	170	32
Clamps.....	Laundry.....	11	27	(See Metallic vessels, coal-scintles.)			
Clamps.....	Woodworking-Tools.....	51	29	Coat-hangers.....	Apparel.....	10	24
Clamps—				Coating.....	Paper-Making.....	243	15
Box-and-miter.....	do.....	59	29	Coating and embossing	Caoutchouc and Minor Plas-	34	15
Pivoted-jaw.....	do.....	43	29	moldings.....	tics.....		
Single-screw.....	do.....	69	29	Coats and vests.....	Apparel.....	165	24
Sliding-jaw.....	do.....	71	29	Cocks and faucets—			
Clarinet and flutes.....	Music.....	35	5	Compound.....	Water-Distribution.....	109	9
Clasps.....	Clasps, Buckles, and Buttons.....	750	11	Reciprocating valves.....	do.....	865	9
Clasps—				Sliding gates.....	do.....	332	9
Pencil.....	Stationery.....	95	5	Tank.....	do.....	467	9
Cleaners.....	Plows.....	74	1	Thermal.....	do.....	37	9
Cleaners.....	Steam-Boilers.....	247	18	Tube-compressors.....	do.....	26	9
Cleaners.....	Type-Writing Machines.....	35	30	Turning plugs.....	do.....	347	9
Cleaners—				Cocooneries.....	Silk.....	7	21
Steam or air jet.....	Steam-Boilers.....	84	18	Coffee and tea pots.....	Stoves and Furnaces.....	726	19
Cleaning.....	Artesian and Oil Wells.....	55	25	Coffee-mills.....	Mills.....	117	25
Cleaning.....	Sewerage.....	24	9	Coffer-dams.....	Hydraulic Engineering.....	31	4
Cleaning.....	Silk.....	4	21	Coffins.....	Undertaking.....	91	20
Cleavers.....	Spinning.....	30	21	Coffins—			
Cleats and belaying-pins.....	Ships.....	35	22	Brackets.....	do.....	6	20
Clevises.....	Plows.....	255	1	Corners.....	do.....	20	20
Clips.....	Carriages and Wagons.....	60	10	Fasteners.....	do.....	109	20
Clips—				Head-rests.....	do.....	27	20
Paper.....	Stationery.....	240	5	Lids.....	do.....	78	20
Clock-cases.....	Horology.....	73	23	Life-signals.....	do.....	6	20
Clocks.....	do.....	158	23	Linings and coverings.....	do.....	27	20
Clocks—				Metallic.....	do.....	65	20
Calendar.....	do.....	119	23	Plastic material.....	do.....	54	20
Electric.....	do.....	300	23	Shields.....	do.....	8	20
Geographical.....	do.....	23	23	Wooden.....	do.....	20	20
Pneumatic.....	do.....	21	23	Coilers.....	Carding.....	14	21
Clock-striking.....	do.....	118	23	Coiling.....	Coopering.....	55	29
Clock-winding.....	do.....	58	23	Coiling.....	Metal-Bending.....	38	14
Clod-crushers.....	Harrows and Diggers.....	28	1	Coiling.....	Wire-Working.....	11	14
Clod-crushers—				By mandrel—			
Barred and corrugated	do.....	22	1	Definite length.....	do.....	55	14
rollers.....	do.....			Indefinite length.....	do.....	47	14
Drag-bars.....	do.....	19	1	By rolls.....	do.....	19	14
Drag-bars and harrows.....	do.....	79	1	Coiling and bending pipe.....	Metal-Bending.....	75	14
Toothed rollers and	do.....	40	1	Coin-counters.....	Measuring-Instruments.....	148	23
wheels.....				Coin-packages.....	do.....	69	23
Close carriages.....	Carriages and Wagons.....	80	10	Coin-testers.....	do.....	32	23
Closet-cisterns.....	Baths and Closets.....	422	9	Coke—			
Close vats.....	Bleaching and Dyeing.....	42	6	Processes.....	Charcoal and Coke.....	21	31
Clothes-clamps.....	Beds.....	43	8	Retort-ovens.....	do.....	21	31
Clothes-driers.....	Laundry.....	757	27	Coke-ovens.....	do.....	44	31
Clothes-line fasteners.....	do.....	204	27	Coke-ovens—			
Clothes-line reels.....	do.....	56	27	Chargers and discharg-	do.....	19	31
Clothes-lines.....	do.....	139	27	ers.....			
Clothes-pin machines.....	Woodworking-Machines.....	8	29	Doors.....	do.....	11	31
Clothes-pounders.....	Laundry.....	196	27	Dumping-bottoms.....	do.....	11	31
Clothes sticks and tongs.....	do.....	25	27	Cold.....	Preserving.....	42	6
Cloth-measuring ma-	Measuring-Instruments.....	157	23	Collapseable tube.....	Pumps.....	25	9
chines.....				Collapsible tube conduc-	Electricity. Electric Rail-	15	26
Cloth, ornamenting.....	Fine Arts.....	76	5	tors.....	ways.....		
Clover-harvesters.....	Harvesters.....	54	7	Collar, cuff, and bosom	Paper-Manufactures.....	108	17
Clover-hullers.....	Thrashing.....	173	25	machines.....			
Clutches.....	Clutches.....	38	12	Collar-fasteners.....	Harness.....	125	11
Clutches—				Collar-machines.....	do.....	100	11
Eccentric or wedge.....	do.....	22	12	Collars and cuffs.....	Apparel.....	298	24
Expansible segment.....	do.....	49	12	Collars and tops.....	Lamps and Gas-Fittings.....	67	30
Fluid.....	do.....	8	12	Coloring.....	Photography.....	50	6
Frictional and positive.....	do.....	19	12	Coloring and polishing	Hides, Skins, and Leather.....	19	31
Intermittent-grip.....	do.....	195	12	apparatus.....	do.....		
Intermittent-grip—				Coloring and polishing	do.....	76	31
Ratchet.....	do.....	89	12	processes.....			
Strap and dog or ball.....	do.....	166	12	Color-machines.....	Printing.....	52	17
Lever-shoe.....	do.....	35	12	Color-machines—			
Locking-pawl.....	do.....	83	12	Coloring-tools.....	do.....	33	17
Longitudinally-mov-				Colters.....	Plows.....	207	1
able—				Colters—			
Double-face.....	do.....	97	12	Rolling.....	do.....	155	1
Single-face.....	do.....	189	12	Columns and timber.....	Fireproof Buildings.....	13	4
With projections.....	do.....	189	12	Comb-dabbing mechanism.....	Carding.....	14	21
Magnetic.....	do.....	9	12	Combination-garments.....	Apparel.....	114	24
Multiple-disk.....	do.....	17	12	Combination organ stop-	Music.....	23	5
Radially-movable	do.....	126	12	actions.....			
shoes.....				Combined cane and nm-	Umbrellas and Canes.....	51	24
Radially-movable				brella.....			
shoes—				Combined dish cleaners	Washing Apparatus.....	46	27
Opposing.....	do.....	42	12	and drainers.....			
Split-ring.....	do.....	107	12	Combined engine and	Steam-Engines.....	79	18
Strap.....	do.....	55	12	boiler.....	Brushing and Scrubbing ..	86	27
Coal.....	Gas.....	50	31	Combined mop heads and			
Coal and oil.....	do.....	40	31	wringers.....			
Coal and water.....	do.....	38	31	Combined organ and pi-	Mnsic.....	22	5
Coal-breakers.....	Mills.....	56	25	ano.....			
Coal, oil, and water.....	Gas.....	128	31	Combined punching and	Metal Punching and Shear-	102	14
Coal-oil—				shearing.....	ing.....		
Processes.....	Mineral Oils.....	11	31				
Retorts.....	do.....	14	31				

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Combined rakes and tedders.	Harvesters	79	7	Couplers.	Music	75	5
Combined scrubbers and mops.	Brushing and Scrubbing	29	27	Coupling-bars	Velocipedes	12	7
Combing	Carding	48	21	Couplings	Plows	68	1
Combing, circle combs	do	50	21	Couplings and tow-lines	Ships	32	22
Combs	Toilet	136	24	Couplings—			
Combs and brushes	Electricity. Medical and Surgical	22	26	Arrowhead and jaws	Railway Draft Appliances	357	34
Comb-teeth, cutting	Woodworking-Machines	15	29	Balls	do	337	34
Compasses	Optics	110	30	Beveled link and fixed catch.	do	46	34
Compensating journals	Journal-Boxes, Pulleys, and Shafting.	40	12	Beveled link and swing catch.	do	120	34
Compensators	Railways	6	4	Combined—			
Compensators—				Air-brake	do	32	34
Intermittent grip	do	18	4	Draw-bar and hook, with link.	do	12	34
Slot	do	8	4	Headed link and V-slot.	do	100	34
Weight	do	16	4	Hook and catch	do	372	34
Composing-sticks	Printing.	47	17	Hook and link	do	452	34
Composite walls	Masonry	13	4	Hook and link—			
Composition	Artificial Stone, Lime, and Cement.	460	15	Combined	do	124	34
Composition	Composite Roofings and Coverings.	274	15	Janney type—			
Compositions	Caoutchouc and Minor Plastics.	155	15	Emergency-releases	do	13	34
Compositions	Fertilizers.	125	6	Gravity-locks	do	28	34
Compositions—	Mineral Oils.	32	31	Horizontal sliding latches.	do	43	34
Burraing-fluid	do	45	31	Knuckle-openers	do	45	34
Compound	Pumps.	175	9	Knuckle openers and locks combined.	do	64	34
Compound	Steam-Engines	195	18	Pivoted—			
Compound—				Horizontal latches	do	51	34
Locomotive	do	80	18	Vertical latches	do	98	34
Lumber	Carpentry	43	29	Safety-brackets	do	14	34
Metal-working machines.	Tools and Implements Making	68	13	Vertical sliding pins.	do	179	34
Compounds—				Link-lifters	do	426	34
Fire-extinguishing	Chemicals	33	6	Link, star-wheel detent.	do	15	34
Food	Preserving	206	6	Miller book	do	166	34
Insulating	Caoutchouc and Minor Plastics.	153	15	Pins and links.	do	237	34
Pyrotechnic	Explosives.	14	6	Pin-supports—			
Cop-tubes	Spinning	19	21	Balls	do	113	34
Copy-holders	Stationery	144	5	Gravity	do	573	34
Cord and rope machines.	Cordage	242	21	Spring	do	455	34
Cords and ropes	do	82	21	Rolling detent	do	82	34
Corking-machines	Packaging and Dispensing Liquids.	39	32	Rotary heads	do	133	34
Corn-coverers	Plows	28	1	Sliding detent	do	274	34
Corn-cribs	Thrashing	9	25	Swing-pins	do	488	34
Corner-fastenings	Beds.	258	8	Tools	do	34	34
Corner-shields	Carpentry	7	29	Train	do	16	34
Cornets and trumpets.	Music	73	5	Twin-jaws	do	349	34
Corn-harvesters—				Uncoupling-levers.	do	394	34
Implement.	Harvesters	22	7	Covering	Wire-Working	3	14
Stalk-cutters	do	115	7	Covering—			
Stalk-cutters—				Cord.	Cordage	92	21
Droppers—				Yarn	Carding	25	21
Crane	do	30	7	Yarn	Spinning	14	21
Direct-tilting	do	171	7	Covers.	Bookbinding	59	5
Ejector	do	38	7	Covers.	Furniture	5	8
Endless apron	do	31	7	Covers.	Umbrellas and Canes	73	24
Horizontally moving and tilting.	do	45	7	Cow-milkers	Dairy	91	2
Sliding bottom.	do	21	7	Cradles	Beds.	181	8
Strippers	do	43	7	Cradles—			
Strippers—				Motor-operated	do	50	8
Comb.	do	27	7	Scythes and	Harvesters	167	7
Knife	do	24	7	Cranes and derricks	Cranes and Derricks	23	12
Roller	do	78	7	Cranes and derricks—			
Corn-husking—				Motor-operated	do	39	12
Implements.	Thrashing	114	25	Motor-operated—			
Machines	do	179	25	Vertically-adjustable jib.	do	26	12
Corn-planters	Seeders and Planters	1770	1	Rectilinearly-movable load-support.	do	37	12
Corn-poppers	Stoves and Furnaces.	58	19	Rectilinearly-movable load-support—			
Corn-shellers—				Electric	do	7	12
Breast and cylinder.	Thrashing	204	25	Hydraulic	do	10	12
Disk-action	do	175	25	Load-lifting devices.	do	19	12
Ear-grasping	do	122	25	Longitudinal shaft driver.	do	7	12
Implements	do	64	25	Stationary-motor.	do	28	12
Peripheral action	do	22	25	Traveling-motor	do	12	12
Corn-shockers	Harvesters	21	7	Rotary load-support	do	134	12
Corse-coolers	Refrigeration	89	28	Rotary load-support—			
Corrugating	Metal-Bending.	105	14	Vertically-adjustable jib.	do	105	12
Corset-fastenings	Clasps, Buckles, and Buttons.	300	11	Rotary rectilinearly-movable load-support.	do	45	12
Corsets	Crinoline and Corsets.	542	24	Stationary load-support.	do	54	12
Cotton-choppers	Plows	417	1	Stationary load-support—			
Cotton-harvesters	Harvesters	233	7	Jib	do	50	12
Cotton-planters	Seeders and Planters	354	1	Crank-clutches.	Velocipedes	5	7
Cotton-scrapers	Plows	185	1	Compound tools	Kitchen and Table Articles	53	8
Counterbalances	Railway Rolling-Stock.	4	34	Compound tools—			
(See Wheels.)				Gripping	do	24	8
Counterpoise-carriages	Ordnance	31	22	Compressed-air-water-elevators.	Pumps	123	9
Counters	Store-Furniture	14	8				
Counters—							
Attachments	do	14	8				

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Compressing	Metal-Forging	14	13	Crushers and graters—			
Concrete	Paving	300	15	Reciprocating	Vegetable Cutters and Crush-	83	25
Condensers	Driers	16	28		ers.		
Condensers	Telegraphy	11	16	Rotary	do	155	25
Condensers—				Cutches	Artificial Limbs	54	20
Injector	Steam-Engines	140	18	Cryptography	Educational Appliances	24	31
Surface	do	205	18	Cube sugar	Sugar and Salt	49	6
Condiment-holders	Kitchen and Table Articles	123	8	Cuff-holders	Clasps, Buckles, and Buttons	300	11
Condiment-holders—				Culinary	Kitchen and Table Articles	82	8
Pulverizing	do	45	8	Cultivator-irons	Tools and Implements	20	13
Conductors	Electricity. Conductors	489	26		Making		
Conductors—				Cultivator-teeth	Plows	335	1
Anti-inductive	Telephony	70	16	Cultivators	do	1094	1
Conductor-supports	Roofing	32	29	Cultivators—			
Conductor supports and	Electricity. Electric Rail-	200	26	Hand	do	47	1
insulators	ways.			Hand—			
Conduit-slot	Railway-Brakes	17	34	Wheel	do	163	1
Confectionery	Sugar and Salt	100	6	Parallel	do	187	1
Confectionery machines	Bread, Cracker, and Lozenge	157	15	Revolving	do	38	1
	Making.			Rolling	do	65	1
Conformators	Measuring-Instruments	42	23	Rotary	do	182	1
Connectors	Electricity. Conductors	304	26	Rotary—			
Construction	Sewerage	26	9	Horizontal	do	29	1
Construction—				Straddle-row	do	257	1
Miscellaneous	Masonry	41	4	Wheel	do	249	1
Converters	Metallurgy	56	3	Wheel—			
Converters—				Straddle-row	do	1480	1
Fixed	do	15	3	Cupolas	Metallurgy	50	3
Furnace	do	7	3	Cupolas—			
Runway	do	4	3	Drop-bottoms	do	5	3
Sectional	do	7	3	Fore-hearths	do	51	3
Tuyeres and bottoms	do	21	3	Water-jackets	do	21	3
Conveyers	Conveyers	84	12	Wind-chests and tuy-	eres.	44	3
Conveyers—				Cups	Kitchen and Table Articles	43	8
Endless	do	140	12	Cups—			
Endless—				Collapsible	do	10	8
Adjustable-leg	do	94	12	On belt	Seeders and Planters	26	1
Belt	do	31	12	On disk	do	72	1
Bolt	do	14	12	Sponge	Stationery	110	5
Buckets	do	152	12	Curing, tobacco	Tobacco	61	2
Buckets—				Currying hat-brims	Apparel	110	24
With traction-roll-	do	46	12	Currycombs	Care of Live Stock	283	2
ers.				Currying	Hides, Skins, and Leather	31	31
Flights	do	46	12	Curtain—			
Hooks	do	16	12	Holders	Curtains, Shades, and Screens	25	8
Pneumatic	do	119	12	Poles	do	43	8
Pneumatic—				Poles and rings	do	35	8
Stackers	do	29	12	Pole-supports	do	56	8
Reciprocating	do	8	12	Rings and pins	do	71	8
Retransfer and weigh-	do	23	12	Curtain-cord—			
ing.				Holders	do	11	8
Screw	do	70	12	Tighteners	do	134	8
Store-horse	do	30	12	Curtains	Railway Rolling Stock	9	34
Thrasher attachments	do	75	12	(See Cars, sleeping.)			
Foldable	do	17	12	Curve-scribers	Drafting	22	23
Laterally and verti-	do	91	12	Curving plates	Metal-Bending	32	14
cally adjustable.				Cutlery-making	Hardware-Making	89	13
Oscillatory	do	39	12	Cut-nail making	Nails and Spikes	158	13
Vertically adjustable.	do	25	12	Cut-off	Steam-Engine Valves	312	18
Trimmers	do	11	12	Cut-offs	Fluid-Pressure Regulators	69	31
Coping	Masonry	11	4	Cut-offs—			
Crank-paddles	Marine Propulsion	58	22	Automatic	Lamps and Gas-Fittings	87	30
Cranks and levers	Machine Elements	375	12	Pressure	do	41	30
Cranks and levers—				Cut-offs and spouts	Water-Distribution	184	9
Handles	do	41	12	Cut-outs—			
Crates	Packing and Storing Vessels	66	32	Electromagnetic	Electric Lighting	147	16
(See Wooden boxes,				Hanger	do	32	16
crates.)				Mechanical	do	77	16
Crates. Baskets and	do	45	32	Mechanical—			
(See Metallic vessels,				Oscillating—			
baskets and crates.)				Snap	do	103	16
Crayon-holders	Stationery	260	5	Spring	do	33	16
Crayon-machines	Caoutchouc and Minor Plas-	51	15	Rotary	do	84	16
	tics.			Sliding	do	49	16
Cream-pumps	Dairy	4	2	Thermal	do	113	16
Cribbing	Hydraulic Engineering	13	4	Thermal—			
Cribs	Beds	51	8	Branch	do	22	16
Cribs—				Lamp	do	44	16
Attachments	do	35	8	Plug	do	14	16
Crimping	Boots and Shoes	280	11	Successive	do	39	16
Crimping and curling	Toilet	186	24	Cutters	Glass	81	15
Crocheting	Knitting and Netting	8	21	Cutters	Paper-Manufactures	27	17
Croquet	Games and Toys	35	7	Cutters	Woodworking-Machines	91	29
Crossing signals, auto-	Railways	59	4	Cutters—			
matic				Bread	Vegetable Cutters and Crush-	85	25
Crossings	do	89	4		ers.		
Crossings—				Chain	Woodworking-Machines	13	29
Movable-rail	do	32	4	Reciprocating	Paper-Manufactures	236	17
Movable-rail—				Reciprocating	Vegetable Cutters and Crush-	234	25
Stub	do	14	4		ers.		
Cross-weaving	Weaving	29	21	Rotary	Paper-Manufactures	248	17
Cross-weld	Metal-Tube Manufacture	23	13	Rotary	Vegetable Cutters and Crush-	231	25
Crozing barrels	Coopering	73	29		ers.		
Crozing staves	do	40	29	Rotary—			
Crochets	Metallurgy	30	3	Slitters and winders	Paper-Manufactures	28	17

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Cutters—				Derailers and replacers..	Railway Rolling-Stock.....	8	34
Rotary—				Derailing-switches.....	Railways.....	12	4
Stocks.....	Woodworking-Machines....	369	29	Derailment-guards.....	Railway Rolling-Stock.....	30	34
Transverse.....	Paper-Manufactures.....	47	17	Derailment-guards—			
Traveling.....	do.....	37	17	Inclined wheels.....	do.....	13	34
Sod.....	Plows.....	45	1	Rail-interlocking.....	do.....	14	34
Traveling.....	Paper-Manufactures.....	29	17	Supplemental wheels.....	do.....	14	34
Cutters and cutter-hold- ers.....	Metal Turning, Planing, and Milling.....	180	13	Derricks, Cranes and.....	Cranes and Derricks.....	23	12
Cutting.....	Apparel.....	244	24	Desk-rulers.....	Stationery.....	125	5
Cutting.....	Leather-Working Machin- ery.....	430	11	Desks.....	Furniture.....	57	8
Cutting.....	Metal Punching and Shear- ing.....	100	14	Desks—			
Cutting and straightening	Wire-Working.....	50	14	Attachments.....	do.....	6	8
Cutting apparatus—				Lids.....	do.....	50	8
Endless.....	Harvesters.....	59	7	Flexible.....	do.....	10	8
Guard-fingers and fin- ger-bars.....	do.....	194	7	Portable.....	do.....	27	8
Reciprocating.....	do.....	342	7	Sectional.....	do.....	33	8
Rotary.....	do.....	42	7	Table.....	do.....	43	8
Vibrating.....	do.....	37	7	Desiccation.....	Preserving.....	165	6
Cutting double pile fab- rics.....	Weaving.....	23	21	Detaching, hoisting, and lowering.....	Boats.....	233	22
Cutting dye-wood.....	Woodworking-Machines....	18	29	Details.....	Telephony.....	91	16
Cutting gears.....	do.....	5	29	Detector-bars.....	Railways.....	13	4
Cutting lace and looped fabrics.....	Cloth-Finishing.....	20	21	Detergents.....	Oils, Fats, and Glue.....	405	31
Cutting printers' leads.....	Sheet-Metal Ware. Making.....	44	14	Detonating-signals.....	Railways.....	95	4
Cutting sharpeners.....	Metal-Working Tools.....	118	14	Devices, Key-holding.....	Music.....	9	5
Cylinder—				Dial.....	Telegraphy.....	29	16
External.....	Driers.....	53	28	Dials and hands.....	Horology.....	96	23
Internal—				Diamond-tools.....	Stone-Working.....	52	25
Rotary horizontal.....	do.....	391	28	Diapers.....	Apparel.....	17	24
Rotary inclined.....	do.....	84	28	Diaphragm.....	Fluid-Pressure Regulators.....	223	31
Stationary horizontal.....	do.....	88	22	Diaphragm.....	Pumps.....	59	9
Stationary inclined.....	do.....	2	28	Diaphragm-lever.....	Fluid-Pressure Regulators.....	112	31
Vertical.....	do.....	5	28	Dice-boxes.....	Games and Toys.....	31	7
Cylinder machines, Bed and.....	Printing.....	109	17	Dice-throwers.....	Coin-Controlled Apparatus.....	22	14
Cylinder relief-valves.....	Steam-Engines.....	111	18	Dicycles.....	Velocipedes.....	93	7
Cylinders and rollers.....	Carding.....	51	21	Dies.....	Matrix-Making.....	17	30
Cylinders for self-playing instruments.....	Music.....	84	5	Dies.....	Tools and implements, Making.....	29	13
Cylindrical.....	Metal-Rolling.....	100	13	Diffusion apparatus.....	Sugar and Salt.....	51	6
Daguerreotypy.....	Photography.....	32	6	Digesters.....	Paper-Making.....	202	15
Dampers.....	Stoves and Furnaces.....	440	19	Diggers.....	Excavating.....	32	4
Dampers—				Dining-cars.....	Railway Rolling-Stock.....	5	34
Automatic.....	do.....	58	19	(See Cars, dining.)			
Automatic—				Dipping-tanks.....	Painting.....	48	31
Balanced-motor.....	do.....	27	19	Dip-pipes.....	Gas.....	65	31
Draft-operated.....	do.....	33	19	Disabling.....	Ordnance.....	4	22
Electrical.....	do.....	72	19	Dish-cleaners.....	Washing Apparatus.....	112	27
Expansion.....	do.....	125	19	Dish-cloth holders.....	do.....	20	27
Fluid-pressure.....	do.....	196	19	Dish-covers.....	Kitchen and Table Articles.....	14	8
Positive-connection.....	do.....	18	19	Dish-drainers.....	Washing Apparatus.....	52	27
Pressure-motor.....	do.....	88	19	Dishes and plates.....	Kitchen and Table Articles.....	49	8
Harmonic.....	Music.....	7	5	Dishes and plates—			
Harmonic—				Covered.....	do.....	59	6
Violin.....	do.....	9	5	Pivoted covers.....	do.....	32	8
Dampers and mutes, vio- lin.....	do.....	33	5	Dishing plates.....	Metal-Bending.....	12	14
Dampers for piano-ac- tions.....	do.....	16	5	Dish-stands.....	Kitchen and Table Articles.....	12	8
Dams and levees.....	Hydraulic Engineering.....	45	4	Disinfectants.....	Medicines.....	216	6
Dams and levees—				Disintegrating fibrous substances.....	Paper-Making.....	65	15
Cores.....	do.....	13	4	Disk and bopper.....	Driers.....	9	28
Mattresses.....	do.....	11	4	Disk on axle.....			
Dams—				Brake-band.....	Railway-Brakes.....	19	34
Coffer.....	do.....	31	4	Peripheral shoes.....	do.....	22	34
Sectional.....	do.....	11	4	Side shoes.....	do.....	10	34
Dark-rooms.....	Photography.....	21	6	Disks and holders.....	Dentistry.....	29	20
Darning.....	Knitting and Netting.....	7	21	Dispensing fountains.....	Packaging and Dispensing Liquids.....	73	32
Darning-lasts.....	Apparel.....	27	24	Dispensing-fountains—			
Dashboards.....	Carriages and Wagons.....	113	10	Cans.....			
Deadening noise.....	Railways.....	37	4	Horizontal.....	do.....	12	32
Decarburizing.....	Annealing and Tempering.....	43	3	Vertical.....	do.....	51	32
Decks and hatches.....	Ships.....	15	22	Draft apparatus.....	do.....	57	32
Decomposing fate.....	Oils, Fats, and Glue.....	100	31	Draft apparatus—			
Decorative lights.....	Lamps and Gas-Fittings.....	18	30	Pressure-reducers.....	do.....	16	32
Decorative painting.....	Fine Arts.....	3	5	Liquid-holders.....	do.....	33	32
Decoys.....	Fishing and Trapping.....	28	22	Portable.....	do.....	21	32
Defecating.....	Sugar and Salt.....	35	6	Portable—			
Deflection-stands.....	Railways.....	10	4	Bottle-taps.....	do.....	24	32
Delinting cotton-seed.....	Brakes and Gins.....	59	21	Siphons.....	do.....	44	32
Deliveries.....	Printing.....	50	17	Pump.....	do.....	17	32
Deliveries—				Display-box covers.....	Advertising.....	35	32
Associators.....	do.....	11	17	Display-boxes.....	do.....	125	32
Droppers.....	do.....	67	17	Sample-holders.....	do.....	105	32
Fly-frames.....	do.....	19	17	Display-cards.....	do.....	110	32
Gripper-fliers.....	do.....	33	17	Display-forms.....	Store-Furniture.....	102	8
Receiving-tables.....	do.....	35	17	Display-racks.....	do.....	147	8
Demagnetizing.....	Electricity. Special Appli- cations.....	10	16	Display-racks—			
Dental instruments.....	Electricity. Motive-Power.....	48	26	Adjustable-arm.....	do.....	49	8
Depilating.....	Hides, Skins, and Leather.....	26	31	Enclosed.....	do.....	85	8
Depurators.....	Surgery.....	37	6	Hanging.....	do.....	73	8
				Roll.....	do.....	110	8
				Rope.....	do.....	18	8
				Rotary.....	do.....	99	8
				Rotary—			
				Enclosed.....	do.....	40	8

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Display-racks—	Store-Furniture	28	8	Double-piston.....	Pumps.....	191	9
Sample-sheet.....				Doubling.....	Silk.....	5	21
Sample-sheet—				Donbling.....	Spinning.....	48	21
Rotary.....	do	26	8	Dough-raisers.....	Stoves and Furnaces.....	46	19
Display-stands.....	do	75	8	Dovetailing.....	Woodworking-Machines.....	59	29
Display-trays.....	Advertising.....	55	32	Draft—			
Distance-instruments.....	Optics.....	63	30	Cable.....	Railway Draft Appliances.....	13	34
Distilled spirits.....	Alcohol.....	11	31	Equalizers.....	Carriages and Wagons.....	511	10
Distilled spirits—	do	81	31	Regulators, steam-in-	Stoves and Furnaces.....	28	19
Aging apparatus.....	do			jected.			
Aging apparatus—	do	14	31	Drag—			
Rocking racks.....	do			Crank.....	Wood-Sawing.....	287	29
Aging processes.....	do	24	31	Lever.....	do	236	29
Apparatus.....	do	32	31	Drainage.....	Pumps.....	7	9
Apparatus—	do	65	31	Drains.....	Hydraulic Engineering.....	26	4
Stills.....	do			Drain-tiles.....	Clay and Pottery.....	86	15
Stills—	do	93	31	Draw-bars.....	Railway Draft Appliances.....	254	34
Columns.....	do			Draw-bars—			
Doublers and	do	84	31	Continuous.....	do	40	34
worms.	do	26	31	Street-car.....	do	40	34
Vapor-filters.....	do			Drawbridges.....	Bridges.....	25	4
Rectifying processes.....	do	42	31	Drawer-plates.....	Advertising.....	30	32
Distributors.....	Lamps and Gas-Fittings.....	14	30	Drawers.....	Furniture.....	42	8
Distribution.....	Gas.....	29	31	Drawers—			
Distribution—				Gnides.....	do	84	8
Leakage.....	do	51	31	Locking devices.....	do	47	8
Preventing leakage.....	do	14	31	Swinging.....	do	10	8
Regulating pressure.....	do	21	31	Tilting.....	do	10	8
Separators.....	do	11	31	Draw-gates, bridges.....	Bridges.....	197	4
Ditching-plows.....	Plows.....	157	1	Drawing and evening.....	Spinning.....	100	21
Diving-engines.....	Measuring-Instruments.....	46	23	Drawing—			
Diving-armor.....	Hydraulic Engineering.....	44	4	Boards.....	Fine Arts.....	92	5
Docks.....	do	32	4	Rollers.....	Spinning.....	62	21
Domestic.....	Spinning.....	79	21	Stop mechanism.....	do	68	21
Door and turnstile locks.....	Coin-Controlled Apparatus.....	9	14	Trumpets.....	do	8	21
Door and window frames.....	Carpentry.....	87	29	Draw-plates.....	Metal-Drawing.....	26	13
Door-bells.....	Signals.....	192	22	Drays.....	Carriages and Wagons.....	36	10
Door-checks.....	Builders' Hardware.....	54	20	Dredgers—			
Door-checks—	do	29	20	Anchoring.....	Excavating.....	20	4
Buffers.....	do			Clam-shell.....	do	33	4
Catches.....	do	35	20	Clam-shell—			
Floor.....	do			Buckets.....	do	136	4
Wall.....	do	128	20	Scouring.....	do	69	4
Catches and buffers.....	do	10	20	Scouring—			
Chain or link.....	do	64	20	Hydraulic.....	do	30	4
Foot-holt.....	do	47	20	Dress and mud guards.....	Velocipedes.....	22	7
Foot-lever.....	do	42	20	Dress attachments.....	Trees, Plants, and Flowers.....	45	1
Sliding bolt.....	do	21	20	Dressing and assorting	Brushing and Scrubbing.....	44	27
Trippers.....	do	15	20	machines.			
Weights.....	do	5	20	Dressing, casing, and fla-	Tobacco.....	74	2
Door checks and closers.....	do	8	20	voring tobacco.			
Door checks and closers—				Dressing elate.....	Stone-Working.....	41	25
Liquid.....	do	32	20	Dressing stone.....	do	297	25
Pneumatic.....	do	87	20	Driers.....	Painting.....	22	31
Door-closers, gravitat-	do	41	20	Drill-chucks.....	Metal Boring and Drilling.....	198	13
ing.				Drilling and boring.....	Artesian and Oil Wells.....	401	25
Door-hangers.....	do	130	20	Drilling-machines.....	Metal Boring and Drilling.....	322	13
Door-hangers—				Drill-jars.....	Artesian and Oil Wells.....	33	25
Brackets.....	do	6	20	Drill-rod grabs.....	do	51	25
Roller-carriage.....	do	133	20	Drills.....	Stone-Working.....	517	25
Roller-carriage—				Drills.	Tools and Implements.	103	13
Ball-bearing.....	do	27	20		Making.....		
Sliding.....	do	2	20	Drills—			
Stay-rollers.....	do	23	20	Adjustable-rank.....	Seeders and Planters.....	62	1
Door-openers—				Drills and broadcast	do	11	1
Cab.....	Fences.....	14	1	combined.			
Car.....	do	364	1	Elastic feed-wheels.....	do	17	1
Car-platform.....	do	39	1	Grain.....	do	564	1
Sliding.....	do	15	1	Hand.....	Metal Boring and Drilling.....	52	13
Swinging.....	do	35	1	Ratchet.....	do	164	13
Doors.....	Carpentry.....	110	29	Rock.....	Steam-Engines.....	309	18
Doors.....	Iron Structures.....	17	4	Walking.....	Seeders and Planters.....	78	1
Doors.....	Steam-Boiler Furnaces.....	107	18	Drill-teeth.....	do	187	1
Doors and windows.....	Carriages and Wagons.....	43	10	Drink-mixers.....	Dairy.....	72	2
Doors—				Drip—			
Car.....	Carpentry.....	161	29	Catebers.....	Lamp and Gas-Fittings.....	7	30
Car—	do	176	29	Cups.....	Umbrellas and Canes.....	31	24
Grain.....	do			Troughs.....	Carpentry.....	16	29
Door-securers.....	Builders' Hardware.....	126	20	Driving and lay motions.	Weaving.....	17	21
Door-securers—				Drop-hammers.....	Metal-Forging.....	96	13
Braces.....	do	23	20	Drop-lights—			
Door-springs.....	do	24	20	Burner attachments.....	Lamps and Gas-Fittings.....	32	30
Door-springs—				Counterweight.....	do	76	30
Bow.....	do	19	20	Friction and clutch.....	do	187	30
India-rubber.....	do	18	20	Spring-drum.....	do	137	30
Lever attachments.....	do	132	20	Droppers—			
Sliding-door.....	do	4	20	Direct-tilting.....	Harvestere.....	77	7
Strap and pulley attach-	do	30	20	Miscellaneous.....	do	8	7
ments.				Opening and closing.....	do	40	7
Torsional.....	do	34	20	Side-delivery.....	do	93	7
Torsional—	do			Swinging and tilting.....	do	28	7
Coiled.....	do	27	20	Drums.....	Music.....	55	5
Flat.....	do	29	20	Dry closets.....	Baths and Closets.....	408	9
Volute.....	do	9	20	Dumb-bells and clubs.....	Surgery.....	28	6
Doors, sliding.....	Carpentry.....	159	29	Dumb-waiters.....	Elevators.....	55	12
Double-acting.....	Pumps.....	308	9	Dumping-cars.....	Railway Rolling-Stock.....	63	34
Double-cylinder.....	do	331	9	(See Cars, dumping.)			

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Dumping-wagons	Carriages and Wagons	432	10	Electrolysis—			
Duplex	Telegraphy	117	16	Bleaching	Electro-Chemistry	9	3
Dust-collectors—				Diaphragms	do	3	3
Reciprocating	Mills	69	25	Fused bath	do	22	3
Rotating	do	175	25	Fused bath—			
Dust-guards	Railway Rolling-Stock	5	34	Aluminium	do	28	3
(See Cars, passenger.)				Sodium	do	5	3
Dust-pans	Kitchen and Table Articles	109	8	Purifying liquids	do	4	3
Dust-pans—				Purifying liquids—			
Brush attachments	do	25	8	Alcohol	do	18	3
Foot-pieces	do	18	8	Water	do	66	3
Dust-trunks	Carding	19	21	Tanning	do	7	3
Dyeing processes	Bleaching and Dyeing	116	6	Electromagnets	Electricity. Special Appli- cations.	110	16
Dyes	do	100	6				
Dyes—				Electropneumatic—			
Carbon	do	676	6	Organ-actions	Music	6	5
Dynamometers	Measuring-Instruments	128	23	Self-playing instru- ments.	do	7	5
Dynamos	Telegraphy	27	16	Electrotyping	Printing	34	17
Ear	Surgery	34	6	Elevated	Railways	109	4
Ear-rings	Jewelry	109	5	Elevated—			
Ear-trumpets	Acoustics	39	23	Bicycle	do	10	4
Earth-angers	Artesian and Oil Wells	124	25	Cable-rail	do	39	4
Earth-angers—				Elevated carriers	Hoisting	116	12
Bits	do	277	25	Elevated carriers—			
With carriers	do	12	25	Draft-sustaining	do	78	12
Easels	Fine Arts	121	5	Lever-lock	do	18	12
Eaves-troughs	Roofing	229	29	Non-lowering support	do	25	12
Eaves-troughs—				Ratchet-lock	do	27	12
Strainers	do	16	29	Rope-catch	do	121	12
Edge-planes and shaves	Boots and Shoes	130	11	Sheave-frame catch	do	150	12
Edgers	Wood-Sawing	128	29	Ways	do	47	12
Edging sheets	Sheet-Metal Ware. Making	138	14	Elevator	Driers	78	28
Egg-beaters	Dairy	16	2	Elevators	Electricity. Motive-Power	109	26
Egg-beaters—				Elevators	Elevators	196	12
Reciprocating	do	39	2	Elevators—			
Rotary—				Adjustable balances	do	7	12
Multiple-dasher	do	63	2	Automatic stops	do	26	12
Single-dasher	do	71	2	Chairs	do	5	12
Vibrating	do	45	2	Combined locks and an- tomatic stops	do	12	12
Egg-cups	Kitchen and Table Articles	37	8	Controllers	do	113	12
Egg-testers	Preserving	58	6	Controllers—			
Electric	Railway-Brakes	68	34	Running-rope	do	28	12
Electric actions	Music	35	5	Counterweights	do	12	12
Electrical	Type-Writing Machines	26	30	Guides	do	7	12
Electrical appliances	Firearms	11	22	Hod	do	80	12
Electrical appliances	Ordnance	19	22	Indicators	do	40	12
Electric locomotives	Electricity. Electric Rail- ways.	50	26	Lazy-tongs	do	17	12
Electric locomotives	Railway Rolling-Stock		34	Locks	do	10	12
(See Locomotives, elec- tric.)				Mail	do	17	12
Electric locomotives—				Safety devices	do	26	12
Electric control	Electricity. Electric Rail- ways.	36	26	Safety devices—			
Electromechanical con- trol	do	31	26	Door-locked control- lers.	do	28	12
Motor on axle	do	64	26	Overwinding	do	8	12
Pivoted motors	do	52	26	Shaft-guide catches and grips.	do	309	12
Single and multiple mo- tor	do	19	26	Speed-governors	do	18	12
Spring-mounted motors	do	27	26	Speed-governors—			
Traveling-dynamo	do	8	26	Fluid-retarders	do	38	12
Electric—				Well-bottom cushions	do	13	12
Magnetic clutch, wind- ing-drum.	Railway-Brakes	17	34	Well obstruction	do	24	12
Magnetic shoes	do	16	34	Screw	do	41	12
Motor	Railway Rolling-Stock		34	Screw and traveling sheave or block.	do	16	12
(See Trucks and loco- motives.)				Slack-cable stops	do	32	12
Solenoid-operated	Railway-Brakes	12	34	Well-doors—			
Soles	Electricity. Medical and Surgical	18	26	Horizontal—			
Toys	Games and Toys	19	7	Horizontal bingé	do	155	12
Electrodes	Electricity. Medical and Surgical	52	26	Horizontally-slid- able.	do	38	12
Electrolysis—				Vertical hinge	do	4	12
Aqueous bath	Electro-Chemistry	34	3	Vertically-slidable	do	29	12
Aqueous bath—				Vertical—			
Alloys	do	15	3	Horizontal bingé	do	49	12
Aluminium	do	6	3	Horizontally-slid- able.	do	65	12
Anodes	do	18	3	Vertical hinge	do	6	12
Apparatus	do	84	3	Vertically-slidable	do	115	12
Cathodes	do	14	3	Elevators and drops	Store-Service	57	12
Cathodes—				Ellipsographs	Drafting	50	23
Cleaning	do	3	3	Embalming	Undertaking	11	20
Metallizing	do	42	3	Embalming—			
Chemicals	do	68	3	Apparatus	do	14	20
Copper	do	8	3	Processes	do	8	20
Depolarizing and burnishing.	do	35	3	Embossing	Photography	11	6
Gold	do	3	3	Embroidering	Sewing-Machines	237	24
Multiple	do	22	3	Embroidery-cases	Advertising	30	32
Nickel	do	29	3	Embroidery-patterns	Apparel	35	24
Ores	do	57	3	Enameling	Glass	99	15
Silver	do	2	3	Enameling wood	Painting	27	31
Tin	do	8	3	End-gates	Carriages and Wagons	415	10
Zinc	do	4	3	Endless belts	Hides, Skins, and Leather	13	31
				Endless carrier	Driers	120	28
				Endless scraper	do	7	28
				Engines	Dentistry	27	20

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Engines—				Fabrics	Felt and Fur	109	21
Air	Air and Gas Engines	25	28	Fabrics	Knitting and Netting	263	21
Bracket-supports	Dentistry	30	20	Fabrics	Paper-Making	326	15
Caloric	Air and Gas Engines	255	28	Fabrics	Wire-Working	18	14
Compound	Steam-Engines	195	18	Fabrics—			
Explosive	Air and Gas Engines	646	28	Elastic	Weaving	35	21
Friction-gear	Dentistry	15	20	Fabrics	do	192	21
Gas	Air and Gas Engines	99	28	Making	Wire-Working	16	14
Locomotive	Steam-Engines	107	18	Making—			
Oscillating	do	187	18	Coiled	do	19	14
Portable	do	130	18	Twisted	do	48	14
Pumping	do	328	18	Pile	Weaving	85	21
Rotary	do	34	18	Tubular	do	51	21
Single-acting com-	do	103	18	Working	Wire-Working	19	14
pound.				Facing walls	Masonry	65	4
Standard supports	Dentistry	61	20	False stems	Trees, Plants, and Flowers	4	1
Engraving and tools	Fine Arts	50	5	Fan attachments	Pneumatics	212	28
Engraving-machines	do	202	5	Fans and regulators	Thrashing	44	25
Envelope-machines	Paper-Manufactures	214	17	Fans—			
Envelope-openers	Cutlery	31	13	Automatic	Pneumatics	267	28
Envelopes	Paper-Manufactures	439	17	Toilet	do	113	28
Epicycles	Velocipedes	24	7	Fare-boxes	Packing and Storing Vessels	18	32
Erasers	Stationery	73	5	Fare-boxes—			
Erasers—				Change	do	29	32
Knife	do	49	5	Check-receivers	do	41	32
Evaporating-pans	Sugar and Salt	778	6	Closed-slot	do	21	32
Excavators—				Conveyers	do	9	32
Chain and bucket	Excavating	131	4	Detachable locking-re-	do	19	32
Chain and bucket—				ceptacle.			
Buckets	do	10	4	Portable	do	11	32
Dippers	do	110	4	Portable closures	do	30	32
Hydraulic	do	127	4	Shelf—			
Hydraulic—				Rotating	do	20	32
Pipe-supports	do	7	4	Serrated	do	10	32
Steam vacuum	do	27	4	Sliding	do	15	32
Suction-pipe mouth-	do	26	4	Tilting	do	18	32
pieces.				Tilting—			
Miscellaneous	do	8	4	Multiple	do	16	32
Plow and carrier	do	211	4	Farm implements	Tools and Implements	13	13
Rammers	do	10	4	Feed mechanism	Making		
Road beds and grades	do	9	4	Feed mechanism—	Woodworking-Machines	31	29
Scoops	do	132	4	Rolls	do	86	29
Scoops—				Feeders	Steam-Boilers	600	18
Railway-side	do	30	4	Feeding	Knitting and Netting	121	21
Scrapers	do	162	4	Feeding	Printing	63	17
Scrapers—				Feeding	Sewing-Machines	352	24
Distant power	do	56	4	Feeding—			
Railway-side	do	9	4	Air	Steam-Boiler Furnaces	517	18
Sledged	do	34	4	Cards	Carding	128	21
Wheeled	do	226	4	Fine fuel	Steam-Boiler Furnaces	66	18
Screw	do	14	4	Fuel	do	185	18
Screw and carrier	do	16	4	Gages	Printing	26	17
Self-loading carts	do	22	4	Gages—			
Self-loading carts—				Front stops	do	26	17
Carrier	do	17	4	Separators	do	69	17
Scoop	do	185	4	Separators—			
Wheel	do	34	4	Buckling	do	34	17
Snow-road machines	do	41	4	Pneumatic	do	37	17
Treating quicksand	do	8	4	Sheet-cutters	do	42	17
Wheel	do	141	4	Steam	Steam-Boiler Furnaces	354	18
Wheel and belt	do	9	4	Web	Printing	22	17
Wheel and carrier	do	33	4	Feeding and tension	Wire-Working	16	14
Exclusion of air	Preserving	246	6	Fellies and rims	Carriages and Wagons	100	10
Exercising devices	Music	10	5	Felt	Composite Roofings and Cov-	77	15
Exercising devices—				Front stops	erings.		
Hand attachments	do	7	5	Felting-machines	Felt and Fur	325	21
Keyboard	do	14	5	Fence- bars of sheet	Metal Punching and Shear-	74	14
Keyboard attachments	do	17	5	metal.	ing.		
Vocal	do	4	5	Fence-posts, bases, metal.	Fences	171	1
Exercising-machines	Electricity. Medical and	14	26	Fences—			
Exercising-machines	Surgical			Barbed	do	278	1
Exhaust mechanism	Surgery	309	6	Barbed—			
Exhausters	Steam-Engines	186	18	Linked	do	40	1
Exhaust, regenerated	Gas	14	31	Ribbon	do	120	1
Exhaust, regenerated	Steam-Engines	69	18	Visible	do	28	1
Exhibitors—				Cat-guards	do	20	1
Movable-object	Coin-Controlled Apparatus	28	14	Earth and plastic	do	5	1
Surface	do	42	14	Flood	do	177	1
Express	Saves	12	20	Iron	do	228	1
Express-cars	Railway Rolling-Stock	34		Wire	do	133	1
(See Cars, express.)				Wood	do	168	1
Extension-ladders	Fire Escapes and Ladders	58	4	Wood—			
Extinguishers—				Panel	do	446	1
Fluid	Lamps and Gas-Fittings	9	30	Panel—			
Mechanical	do	230	30	Suspended	do	15	1
Pneumatic	do	22	30	Worm	do	133	1
Extracting oils	Oils, Fats, and Glee	190	31	Picket	do	32	1
Extracts	Medicines	100	6	Picket—			
Eye	Surgery	33	6	Panel	do	69	1
Eyebolts and hooks	Hardware-Making	96	13	Tied	do	203	1
Eyeglasses	Optics	243	30	Fenders	Carriages and Wagons	56	10
Eyefletting-machines	Clasps, Buckles, and Buttons	175	11	Fenders	Plows	166	1
Eyeflets	do	100	11	Fenders	Railway Rolling-Stock	38	34
Eyeflets	Metal Personal Wear. Mak-	54	14	(See Wheel-fenders.)			
Fabrics	ing			Fenders	Roofing	29	29
	Caoutchouc and Minor Plas-	119	15	Fenders	Stoves and Furnaces	72	19
	tics.						

Sub-class.	Class.	No. of Patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Fenders and torpedo-guards.	Ships	38	22	Fire-guards.	Fences.	23	1
Fermenting apparatus.	Alcohol.	4	31	Fire-kindlers.	Fuel.	171	15
Fermenting apparatus—				Fire-kindlers—			
Vats.	do	41	31	Absorbers.	do	100	15
Vent-hungs.	do	49	31	Automatic.	do	30	15
Fermenting processes.	do	42	31	Fireplaces.	Stoves and Furnaces.	169	19
Ferrules, rings, and thimbles.	Hardware-Making.	87	13	Fireplaces—			
Ferry-guards, bridges.	Bridges.	8	4	Blowers.	do	91	19
Fertilizer-distributors.	Seeders and Planters.	404	1	Fire-backs.	do	50	19
Fertilizer-distributors—				Fronts.	do	42	19
Hand.	do	25	1	Hot-air.	do	159	19
Revolving hoppers.	do	23	1	Fire-pots and linings.	do	160	19
Walking.	do	36	1	Fireproof.	Safes.	78	20
Fibers.	Paper-Making.	65	15	Fireproof—			
Fibrous compositions.	Caoutchouc and Minor Plastics.	72	15	Roofs.	Fireproof Buildings.	22	4
Fifth-wheels.	Carriages and Wagons.	447	10	Shutters.	do	54	4
Fifth-wheels—				Fireproofing compounds.	Painting.	27	31
Making.	Wagon, Car, and Track Irons	24	13	Fire-shields.	Fireproof Buildings.	53	4
Figure toys.	Games and Toys.	332	7	Fire-tubes.	Steam-Boilers.	314	18
Figure wheeled toys.	do	171	7	Fish-dressing machines.	Butchering.	9	25
Filaments and carbons.	Electric Lighting.	282	16	Fishing—			
File-blanks.	Tools and Implements.	30	13	Fishways.	Fishing and Trapping.	16	22
File-cutting.	Making	170	13	Floats.	do	27	22
Files—				Harpoons and spears.	do	15	22
Bill.	Stationery.	166	5	Hooks.	do	230	22
Newspaper.	Bookbinding.	119	5	Nets and seines.	do	116	22
Files and rasps.	Tools and Implements.	89	13	Oyster-culture.	do	9	22
Fillers.	Making	45	31	Oyster-dredges.	do	28	22
Filling and corking.	Painting.	39	32	Oyster rakes and tongs.	do	18	22
Internal-stopper.	Packaging and Dispensing	39	32	Pisciculture.	do	30	22
Reciprocating-head.	Liquids.	39	32	Reels.	do	190	22
Turn-over.	do	17	32	Rods.	do	122	22
Filling-machines.	do	17	32	Sinkers.	do	28	22
Filling-machines—				Flags, Banners and	Fine Arts.	11	5
Cut-offs—				Flagstaff-holders.	Signals.	37	22
Automatic.	do	19	32	Flanges for piano-actions.	Musie.	20	5
Float.	do	43	32	Flanging.	Metal-Bending.	85	14
Gage.	do	31	32	Flanging—			
Gage—				Straight.	do	6	14
Sirup.	do	16	32	Flashers.	Steam-Boilers.	55	18
Reciprocating-head.	do	10	32	Flashings.	Roofing.	24	29
Siphon-tube.	do	16	32	Flash-lamps.	Lamps and Gas-Fittings.	29	30
Filters—				Flasks and chargers.	Projectiles.	44	22
Beer.	Water-Distribution.	28	9	Flax harvesters.	Harvesters.	34	7
Cistern-cleaners.	do	45	9	and			
Cistern-supply.	do	50	9	Flax-thrashers.	Thrashing.	18	25
Docaners.	do	32	9	Fleece dividers and con-	Carding.	55	21
Faucet.	do	154	9	densers.			
Filtering-faucets.	do	37	9	Fleece-removers.	do	35	21
Granular-bed.	do	269	9	Flexible blinds.	Curtains, Shades, and Screens.	63	8
Materials.	do	27	9	Flexible ladders.	Fire Escapes and Ladders.	86	4
Oil.	do	72	9	Flexible ladders—			
Porons-wall.	do	61	9	Reel.	do	87	4
Portable.	do	104	9	Sectional.	do	90	4
Pressure.	do	55	9	Sectional—			
Rotary-bed.	do	43	9	Elevator.	do	22	4
Service-pipe.	do	67	9	Single-stile.	do	34	4
Strainers.	do	102	9	Trolley.	do	11	4
Submerged.	do	65	9	Fliers.	Spinning.	67	21
Systems.	do	52	9	Float.	Fluid-Pressure Regulators.	181	31
Finders.	Photography.	9	6	Float-lever.	do	54	31
Finery-fires.	Metallurgy.	12	3	Flock-cutting.	Felt and Fur.	29	21
Finger-boards.	Music.	9	5	Flocking.	Paper-Making.	11	15
Finger-rings.	Jewelry.	109	5	Flooding.	Fireproof Buildings.	20	4
Finishing.	Cloth-Finishing.	68	21	Flooring, bridges.	Bridges.	5	4
Finishing cut pile fabrics.	do	12	21	Floors.	Carpentry.	57	29
Finishing yarn and thread.	Cordage.	132	21	Floors—			
Fire.	Telegraphy.	202	16	Fixed.	Driers.	21	28
Fire—				Tile and metal.	Masonry.	6	4
Automatic.	do	132	16	Tilting section.	Driers.	27	28
Engine-house apparatus.	do	17	16	Floors, Ceilings and—			
Non-interfering.	do	85	16	Concrete.	Fireproof Buildings.	8	4
Repeaters.	do	15	16	Concrete and metal.	do	80	4
Variable-signal.	do	43	16	Metal.	do	10	4
Variable-signal—				Protected wood.	do	31	4
Dial.	do	96	16	Tile.	do	57	4
Fire-alarms.	Signals.	110	22	Tile and metal.	do	69	4
Fire-alarms and extinguishers.	Telegraphy.	39	16	Floor-sets.	Woodworking-Tools.	149	29
Fire-brick.	Metallurgy.	113	3	Flower-holders.	Trees, Plants, and Flowers.	26	1
Fire-dogs.	Stoves and Furnaces.	17	19	do	do	42	1
Fire-extinguishers.	Ships.	10	22	Flower-pots.	do	15	1
Fire-extinguishers—				Flowers, artificial.	Fine Arts.	88	5
Car-heater.	Fire-Extinguishers.	134	9	Flue and tubular.	Steam-Boilers.	217	18
Chemical.	do	381	9	Flues and tubes, steam-	boiler.	251	18
Portable.	do	152	9	boiler.			
Stationary.	do	356	9	Flues, smoke and air.	Masonry.	11	4
Fire-extinguishing compounds.	Chemicals.	33	6	Fluid-delivery.	Coin-Controlled Apparatus.	55	14
				Fluid-pressure—			
				Automatic.	Railway-Brakes.	155	34
				Brake piston indicators.	do	6	34
				Brake release valves.	do	28	34
				Derailment.	do	33	34
				Direct.	do	131	34
				Electric.	do	25	3
				Engineers' valves.	do	52	3
				Load-regulated valves.	do	21	3
				Momentum-pump.	do	70	3

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Fluid-pressure—				Friction—			
Pressure-retainers	Railway-Brakes	9	34	Shooting lines	Fire Escapes and Ladders ..	10	4
Train-pipe—	.....do	8	34	Tortuous .....	.....do	83	4
Couplings .....	.....do	6	34	Tortuous and jaw .....	.....do	68	4
Release-valves .....	.....do	8	34	Tortuous and jaw—	.....do	26	4
Stop-cocks .....	.....do	104	34	Set-screw .....	.....do	23	4
Triple valves .....	.....do	63	34	Wheel-brake .....	.....do	35	26
Vacuum	Sewerage	32	9	Friction-generators	Electricity. Generation	31	21
Flushing .....	.....do	29	9	Fringe-machines	Weaving	19	21
Flush-tank siphons .....	.....do	35	5	Fringes .....	.....do	177	4
Flutes, Clarinets and	Music	161	27	Frogs	Railways	21	4
Fluting-irons	Laundry	56	13	Frogs—	.....do	41	4
Fluxes	Metal-Welding	100	11	Movable-rail .....	.....do	75	4
Fly-nets	Harness	85	12	Movable-rail—	.....do	63	4
Fly-wheels	Machine Elements	11	6	Lap .....	.....do	83	25
Focusing devices	Photography	112	22	Stub .....	.....do	12	34
Fog-signals	Signals	30	20	Spring-rail .....	.....do	389	7
Foil-condensers	Dentistry	34	13	Fruit and vegetable separa-	Harvesters	9	8
Foil-manufacture	Metal-Rolling	58	17	rators	Kitchen and Table Articles ..	25	
Folders	Printing	17	17	Fruit-cars	Vegetable Cutters and Crush-	182	15
Longitudinal .....	.....do	12	17	(See Cars, fruit.)	ers	41	19
Longitudinal and rotary .....	.....do	23	17	Fruit-gatherers	Stoves and Furnaces	72	21
Newspaper- wrapping	.....do	89	17	Fruit-lifters	Felt and Fur	35	6
machines .....	.....do	49	17	Fruit-squeezers	Explosives	75	3
Oscillating .....	.....do	38	17	Fuel, artificial	Metallurgy	94	6
Reciprocating .....	.....do	14	17	Fuel-boxes	Preserving	174	9
Rotary .....	.....do	36	21	Fulling	Water-Distribution	470	18
Sheet-conveyers	Cloth-Finishing	284	17	Fulminates	Steam-Boiler Furnaces	72	19
Folding	Paper-Manufactures	9	5	Fume-arresters	Stoves and Furnaces	103	3
Folding reed-organ	Music	163	5	Fumigation	Metallurgy	98	3
Followers, bill-files	Stationery	206	6	Funnels .....	.....do	98	3
Food compounds	Preserving	4	20	Furnaces .....	.....do	98	3
Foot extensions	Artificial Limbs	55	4	Furnaces—	.....do	23	3
Foot-guards	Railways	121	19	Bagasse .....	.....do	38	3
Foot-warmers	Stoves and Furnaces	200	9	Blank .....	.....do	23	3
Force	Pumps	68	30	Blank—	.....do	23	3
Forced-draft lamps	Lamps and Gas-Fittings	196	1	Tire .....	.....do	200	3
Force-feed	Seeders and Plasters	42	13	Blast	Stoves and Furnaces	825	19
Forging	Metal-Forging	59	13	Blast—	.....do	41	19
Fork-guards	Cutlery	50	13	Charging devices	Magazine	102	19
Forks .....	.....do	88	1	Charging devices—	Steam	258	19
Forks	Harrows and Diggers	34	1	Bell and hopper	Hydrocarbon	444	19
Forks .....	.....do	5	1	Protecting walls .....	.....do	245	19
Adjustable beads .....	.....do	10	1	Tuyeres	Melting	16	3
Combined forks and	.....do	53	1	Tumps and slag-	Melting—	26	3
shovels .....	.....do	69	13	sports	Glass-pots	15	3
Fodder-forks .....	.....do	103	22	Brick-kilns	Glory-hole	26	3
Potato forks and shov-	Cutlery	29	4	Cremation	Open-hearth	74	3
els	Ships	133	21	Crucible	Pot-hearth	62	3
Forks and spoons	Hydraulic Engineering	39	28	Electric	Tank	89	3
Form .....	.....do	14	4	Forge .....	.....do	178	19
Forming and preserving	Masonry	28	27	Forge—	Stoves and Furnaces	94	3
channels	Brushing and Scrubbing	9	27	Tuyeres .....	.....do	17	3
Forming bats .....	.....do	5	27	Hot-air .....	.....do	12	3
Forms and platens .....	.....do	50	27	Hot-air—	.....do	14	17
Foundations .....	.....do	24	27	Magazine .....	.....do	84	17
Fountain-brushes—	.....do	5	27	Steam .....	.....do	36	17
Blacking .....	.....do	24	27	Hydrocarbon .....	.....do	103	21
Brooms .....	.....do	5	27	Hydrocarbon—	.....do	12	21
Hair .....	.....do	24	27	Injector-burners .....	.....do	158	18
Paint .....	.....do	5	27	Retort-vaporizers .....	.....do	55	29
Scrubbers .....	.....do	24	27	Melting	Measuring-Instruments	212	23
Shaving .....	.....do	5	27	Melting—	Woodworking-Tools	63	29
Tooth .....	.....do	9	27	Glass-pots	Measuring-Instruments	14	23
Window-cleaners .....	.....do	49	27	Glory-hole .....	.....do	85	23
Fountain-discharge	Painting	26	31	Open-hearth .....	.....do	73	29
Fountain-pens	Stationery	33	5	Pot-hearth	Woodworking-Tools	61	23
Fountains	Water-Distribution	68	9	Tank .....	.....do	21	23
Founts	Lamps and Gas-Fittings	41	30	Pigment .....	.....do	31	23
Fracture apparatus	Artificial Limbs	118	20	Portable .....	.....do	121	29
Frame houses	Carpetry	46	29	Reverberatory .....	.....do	16	29
Frames and trays	Driers	28	28	Heating air	Plows	35	1
Frames .....	.....do	57	5	Necks and chimneys .....	.....do	17	3
Piano	Music	21	5	Water-walls and roofs .....	.....do	12	3
Piano-actions .....	.....do	228	5	Furniture .....	.....do	14	17
Picture	Fine Arts	22	14	Furniture—	.....do	84	17
Fraud-preventives	Coin-Controlled Apparatus	8	14	Quoins .....	.....do	36	17
Fraud-preventives—	.....do	5	14	Tools and appliances .....	.....do	103	21
Magnets .....	.....do	161	34	Furs and pelts	Felt and Fur	12	21
Washer-catchers .....	.....do	16	4	Fuse and packing ma-	Cordage	158	18
Freight-cars	Railway Rolling-Stock	18	4	chines	Steam-Engine Valves	55	29
(See Cars, freight.)	.....do	55	4	Gage-cocks	Wood-Turning	212	23
Friction	Fire Escapes and Ladders ..	13	4	Gage-lathes	Measuring-Instruments	63	29
Friction—	.....do	10	4	Gages	Woodworking-Tools	14	23
Hand-clamp .....	.....do	21	4	Gages—	.....do	85	23
Jaw .....	.....do	25	4	Depth .....	.....do	73	29
Jaw—	.....do	9	4	Micrometer .....	.....do	61	23
Set-screw .....	.....do	31	4	Scratch .....	.....do	21	23
Reel .....	.....do	21	4	Surface .....	.....do	31	23
Reel—	.....do	31	4	Thickness .....	.....do	121	29
End-thrust .....	.....do	9	4	Track .....	.....do	16	29
Jaw-brake .....	.....do	31	4	Weather-board .....	.....do	35	1
Jaw-brake—	.....do	9	4	Weather-board—	.....do	16	29
Tension .....	.....do	31	4	Marking .....	.....do	35	1
Strap-brake .....	.....do	31	4	Gage wheels and runners .....	.....do	35	1

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Gaining	Woodworking-Machines.	142	29	Glass and pottery—			
Galleys	Printing	31	17	Jackets	Packing and Storing Vessels	158	32
Galleys—				Jackets—			
Galley-locks .....	.....do	57	17	Stands .....	.....do	26	32
Galley-rests .....	.....do	16	17	Wrapper .....	.....do	67	32
Galvanizing	Coating with Metal	141	3	Jars .....	.....do	123	32
Galvanometers	Electricity. Generation	255	26	Jars—			
Game				Clamp .....	.....do	250	32
Apparatus	Games and Toys	378	7	Expanding-stopper .....	.....do	16	32
Belts	Accouterments	11	32	Screw-cap .....	.....do	107	32
Boards	Games and Toys	419	7	Screw-stopper .....	.....do	35	32
Counters	Signals	92	22	Swing-cover .....	.....do	33	32
(See Indicators, game- counters.)				Swing-fastener .....	.....do	77	32
Gangways	Care of Live Stock	23	2	Stopper-fasteners .....	.....do	62	32
Gangways and bridges	Ships	46	22	Stopper-fasteners—			
Garbage-receptacles	Packing and Storing Vessels	45	32	Cap and tie .....	.....do	57	32
(See Metallic vessels, garbage-receptacles.)				Screw-cap .....	.....do	13	32
Garden-beds	Trees, Plants, and Flowers	4	1	Swing .....	.....do	39	32
Garment-protectors	Apparel	148	24	Swing-stopper .....	.....do	115	32
Garment-supporters	Clasps, Buckles, and Buttons	500	11	Swing-stopper—			
Garters and belts	Apparel	87	24	Aside .....	.....do	5	32
Gas and explosives	Safes	14	20	Yoke .....	.....do	98	32
Gas and water fittings	Hardware-Making	179	13	Yoke and lever .....	.....do	76	32
Gas brackets and valves	Lamps and Gas-Fittings	75	30	Yoke and top-lever .....	.....do	65	32
Gas-burners .....	.....do	125	30	Stopper-locks .....	.....do	34	32
Gas-burners—				Stopper-pullers .....	.....do	26	32
Incandescent .....	.....do	115	30	Stoppers .....	.....do	105	32
Regenerative .....	.....do	144	30	Stoppers—			
Regulating .....	.....do	282	30	Cap .....	.....do	30	32
Gas-checks	Ordnance	10	22	Dose .....	.....do	40	32
Gas-collection	Carbonating Beverages	18	32	Expanding .....	.....do	40	32
Gas-distribution .....	.....do	15	32	Internal .....	.....do	124	32
Gas-fittings	Lamps and Gas-Fittings	22	30	Rotary .....	.....do	9	32
Gas-generators	Carbonating Beverages	48	32	Screw .....	.....do	34	32
Gas-generators—				Screw-cap .....	.....do	19	32
Acid-feed, siphon .....	.....do	10	32	Tube .....	.....do	40	32
Furnace .....	.....do	11	32	Valve .....	.....do	165	32
Rotary-stirrer .....	.....do	20	32	Valve—			
Gas-lighting attachments	Lamps and Gas-Fittings	100	30	Screw .....	.....do	35	32
Gasometers	Coin-Controlled Apparatus	13	14	Glass and stone—			
Gates	Fences	47	1	Curved surfaces	Grinding and Polishing	95	27
Gates—				Plane surfaces .....	.....do	256	27
Compound .....	.....do	50	1	Glass-annealing—			
Dropping .....	.....do	36	1	Flattening-tables	Annealing and Tempering	16	3
Expanding .....	.....do	31	1	Hearths .....	.....do	16	3
Jump .....	.....do	40	1	Leers .....	.....do	25	3
Oscillating .....	.....do	23	1	Leers—			
Railway .....	.....do	12	1	Grids .....	.....do	21	3
Sliding .....	.....do	74	1	Muffles .....	.....do	1	3
Swinging .....	.....do	88	1	Processes .....	.....do	12	3
Wire .....	.....do	41	1	Glass-enameling	Glass	99	15
Gear-cutting	Metal Turning, Planing, and Milling	131	13	Globe attachments	Lamps and Gas-Fittings	17	30
Gearing	Harvesters	148	7	Globes	Educational Appliances	51	31
Gearing	Machine Elements	495	12	Globes	Lamps and Gas-Fittings	65	30
Gearing	Wind-Wheels	44	28	Globe-fastenings	Clasps, Buckles, and Buttons	600	11
Gearing—				Gloves	Apparel	216	24
Belt	Machine Elements	275	12	Glove-sewing machines	Sewing Machines	30	24
Frictional .....	.....do	182	12	Glucose	Sugar and Salt	121	6
Planetary .....	.....do	53	12	Glue	Oils, Fats, and Glue	105	31
Planetary—				Glue-pots	Stoves and Furnaces	22	19
Eccentric .....	.....do	39	12	Governor	Steam-Engine Valves	63	18
Screw .....	.....do	40	12	Governors	Steam-Engines	139	18
Sectional .....	.....do	76	12	Grafting	Trees, Plants, and Flowers	28	1
Sprocket .....	.....do	72	12	Grain-drill cleaners	Seeders and Planters	24	1
Sprocket—				Graining and draining	Sugar and Salt	54	6
Sprocket-chains .....	.....do	324	12	Grain-meter	Measuring-Instruments	104	23
Yieldable .....	.....do	34	12	Grain-meters—			
Gem-setting	Jewelry	100	5	Double-trap bottom .....	.....do	60	23
General	Electricity. Electric Rail- ways	28	26	Oscillating .....	.....do	100	23
Gibs and keys	Machine Elements	96	12	Positively-actuated .....	.....do	57	23
Gilding. Leaf	Fine Arts	30	5	Rotating .....	.....do	92	23
Gin				Twin buckets .....	.....do	55	23
Attachments	Brakes and Gins	29	21	Grain-scoopers—			
Brushes .....	.....do	15	21	Centrifugal	Mills	48	25
Condensers .....	.....do	42	21	Concave face .....	.....do	59	25
Feeders .....	.....do	72	21	Conical .....	.....do	114	25
Feeders—				Cylinder—			
Pneumatic .....	.....do	44	21	Horizontal .....	.....do	233	25
Ribs .....	.....do	47	21	Vertical .....	.....do	242	25
Rollers .....	.....do	9	21	Disk-face .....	.....do	95	25
Saw-cleaners .....	.....do	16	21	Pestle-action .....	.....do	24	25
Saws .....	.....do	22	21	Reciprocating and end- less .....	.....do	31	25
Girders and columns	Towers	244	4	Screw-action .....	.....do	35	25
Glass and pottery—				Grain-separators—			
Bottles and jugs	Packing and Storing Vessels	77	32	Gravity	Thrashing	210	25
Bottles and jugs—				Oat, seed, and garlic .....	.....do	203	25
Brush and spreader .....	.....do	150	32	Rotary screens .....	.....do	145	25
Neck-collars .....	.....do	6	32	Shaking screens .....	.....do	727	25
Boxes and tanks .....	.....do	11	32	Grain-tallies	Measuring-Instruments	81	23
Ejectors .....	.....do	39	32	Grain wheels and casters	Harvesters	35	7
				Granaries and bins	Thrashing	35	25
				Granulating	Shaping Fluid Metal	28	3
				Granulating	Tobacco	26	2
				Graphophones	Acoustics	122	23
				Graphophone-tabletsdo	41	23

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Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Grapples	Hoisting	207	12	Guns—			
Grates	Stoves and Furnaces	42	19	Breach-loading—			
Grates—				Breach-block swing-	Firearms	9	22
Adjustable	do	47	19	ing on center or			
Compound-movement ..	do	53	19	trunnions.			
Cut-offs	do	13	19	Breach-block swing-	do	69	22
Fireplace	do	118	19	ing on longitudinal			
Raking attachment ..	do	45	19	pin or hinge.			
Reciprocating	do	109	19	Breach-block swing-	do	34	22
Rocking-bar	do	374	19	ing upward and			
Rotary	do	204	19	backward.			
Vertical-movement ..	do	42	19	Breach-block swing-	do	57	22
Grates and grate-bars,	do	264	19	ing upward and for-			
stationary.				ward.			
Gridirons	do	278	19	Faucet breach-block,	do	4	22
Grilles	Iron Structures	14	4	chambered.			
Grinding-mills—				Faucet breach-block	do	9	22
Balancing millstones ..	Mills	47	25	with chamber in			
Ball and drum	do	148	25	front.			
Bark	do	66	25	Gas-operated	do	8	22
Chasing	do	211	25	Recoil-operated ..	do	13	22
Coffee	do	117	25	Rotating sleeve on	do	3	22
Compound-movement ..	do	132	25	barrel.			
Cone and shell	do	244	25	Cane	do	31	22
Crushing-rolls	do	417	25	Cartridge-holders, tem-	do	39	22
Cylinder and concave ..	do	185	25	porary.			
Disk-action—				Magazine	do	169	22
Horizontal	do	197	25	Magazine—			
Vertical	do	193	25	Barrel hinged to stock	do	3	22
Feed-regulators	do	165	25	Barrel rotating on par-	do	3	22
Grain-samplers	do	18	25	allel pin.			
Grist-alarms	do	24	25	Barrel sliding forward	do	25	22
Hominy	do	65	25	Barrel swinging later-	do	22	
Impact pulverizer	do	30	83	ally on vertical pin.			
Knife-action	do	117	25	Breach-block sliding	do	20	22
Mill-spindles	do	227	25	vertically in mor-			
Millstone-dress	do	178	25	tise.			
Millstone-exhaust ..	do	97	25	Breach-block swing-	do	179	22
Millstone-trams	do	8	25	ing backward and			
Paint	do	38	25	downward.			
Rotary beaters	do	179	25	Breach-block swing-	do	25	22
Grippers	Railways	61	4	ing downward and			
Grippers—				backward.			
Automatic release	do	54	4	Breach-block swing-	do	4	22
Coal-car	do	19	4	ing laterally back-			
Friction	do	172	4	ward.			
Friction-belt	do	13	4	Breach-block swing-	do	2	22
Overstepping	do	16	4	ing laterally for-			
Roller	do	49	4	ward.			
Sprocket-wheel	do	41	4	Breach-block swing-	do	3	22
Whelp-wheel	do	21	4	ing on center or			
Grooming	Care of Live Stock ..	27	2	trunnions.			
Guard-rail clamps	Railways	23	4	Breach-block swing-	do	6	22
Guards	Lamps and Gas Fittings ..	20	30	ing on longitudinal			
Gnards for pedals	Music	14	5	pin or hinge.			
Guide-machines	Linotyping	5	30	Breach-block swing-	do	5	22
Guides	Sewing Machines	259	24	ing upward and			
Guiding	Cloth-Finishing	19	21	backward.			
Guitars, Banjos and ..	Music	146	5	Breach-block swing-	do	4	22
Gun and pistol holders ..	Accouterments	19	32	ing upward and for-			
Gun-barrels	Arms and Projectiles. Mak-	19	13	ing			
Gun-barrels	Firearms	49	22	Longitudinally-recip-			
Gnpowder	Explosives	81	6	rocating breach-			
Guns—				bolt—			
Air and spring	Firearms	259	22	Firing-pin impelled	do	178	22
Blow	do	11	22	by rotating ham-			
Breach-loading—				mer.			
Barrel hinged to stock	do	16	22	Spring-impelled fir-	do	131	22
Barrel rotating on par-	do	28	22	ing-pin.			
allel pin.				Rotating carrier filled	do	26	22
Barrel sliding forward	do	32	22	from a fixed mag-			
Barrel swinging later-	do	20	22	azine and dis-			
ally on vertical pin.				charged in the car-			
Barrel tilting up at	do	358	22	rier.			
breach.				Gun-trimmings	do	14	22
Barrel tilting up at	do	2	22	Gutters	Paving	57	15
muzzle.				Hackling-machines ..	Brakees and Gins ..	83	21
Breach-block drawn	do	243	22	Hair and wigs	Toilet	77	24
back by hand or lever,				Hair dyes and tonics ..	Medicines	39	6
(bolt-gun.)				Hair-pickers	Brakes and Gins ..	48	21
Breach-block sliding	do	8	22	Hair-pins	Toilet	54	24
laterally in mortise.				Hame-fasteners	Harness	325	11
Breach-block sliding	do	99	22	Hamee	do	200	11
vertically in mor-				Hame-tugs	do	200	11
tise.				Hammers	Tools and Imple-	40	13
Breach-block ewing-	do	169	22		Making		
ing backward and				Hammers and hatchets ..	Woodworking Tools ..	251	29
downward.				Hammere, piano-actions ..	Music	20	5
Breach-block swing-	do	61	22	Hammocks	Beds	71	8
ing downward and				Hammocks—			
backward.				Hooks	do	6	8
Breach-block swing-	do	11	22	Stretchers	do	27	8
ing laterally back-				Supports	do	63	8
ward.				Hand attachments, exer-	Music	7	5
Breach-block swing-	do	7	22	cising devices.			
ing laterally for-				Hand-barrows	Carriages and Wagone ..	23	10
ward.				Hand-binders—			
				Attachments	Harvesters	18	7

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Hand-binders—				Harrow-teeth.....	Harrows and Diggers.....	13	1
Elevated delivery—				Harrow-teeth—			
Rear.....	Harvesters.....	40	7	Spike.....	do.....	33	1
Side.....	do.....	105	7	Spring.....	do.....	91	1
Flat delivery.....	do.....	15	7	Trailing and draw-cut.....	do.....	34	1
Manual traction.....	do.....	12	7	Harvester-irons.....	Tools and Implements.....	36	13
Hand-cars.....	Railway Rolling-Stock.....	11	34	Making.....	Locks and Latches.....	54	20
(See Cars, hand.)	Apparel.....	2	24	Furniture.....	do.....	79	8
Handkerchiefs.....	Velocipedes.....	164	7	Baggage.....	do.....	54	32
Handle-bars. Steering- heads and.....	Builders' Hardware.....	139	20	Apparel.....	do.....	137	24
Handlees.....	Plows.....	38	1	Hat and coat racks.....	do.....	28	24
Handles, braces.....	Builders' Hardware.....	6	20	Hat and fur cases.....	do.....	49	24
Handles, coffin.....	do.....	83	20	Hat blocking and stretch- ing.....	do.....	28	24
Handles and sticks.....	Umbrellas and Canes.....	113	24	Hat brushing and finish- ing.....	do.....	49	24
Hand-levers.....	Railway-Brakes.....	11	34	Hatch-openers.....	Fences.....	35	1
Hand-levers—				Hat-ironing.....	Apparel.....	55	24
Ratchet-drum.....	do.....	9	34	Hat-pouncing.....	do.....	101	24
Ratchet-segment.....	do.....	31	34	Hat-pressing.....	do.....	105	24
Hand-nailing implements	Boots and Shoes.....	280	11	Hats and caps.....	do.....	416	24
Handpieces.....	Dentistry.....	105	20	Hat-sweats.....	do.....	96	24
Handpieces—				Hat-ventilators.....	do.....	113	24
Angle attachments.....	do.....	34	20	Hay-forks—			
Hand-rakers.....	Harvesters.....	103	7	Corkscrew.....	Hoisting.....	16	12
Hand-rests.....	Stationery.....	52	5	Grapples.....	do.....	155	12
Hand-rubbers.....	Laundry.....	38	27	Harpoon.....	do.....	224	12
Hand-saw attachments.....	Woodworking-Tools.....	34	29	Tilting.....	do.....	121	12
Handsaws.....	do.....	187	29	Hay-loaders—			
Hand-screens.....	Trees, Plants, and Flowers.....	43	1	Endless belts.....	Harvesters.....	278	7
Hand-stamps.....	Printing.....	50	17	Intermittent.....	do.....	63	7
Hand-stamps—				Lifting-reels.....	do.....	13	7
Check-punches.....	do.....	111	17	Walking-rakes.....	do.....	46	7
Head and handle.....	do.....	81	17	Hay-racks.....	Carriages and Wagons.....	115	10
Head and handle—				Hay-slings.....	Hoisting.....	86	12
Inking attachment.....	do.....	29	17	Headers.....	Harvesters.....	93	7
Mutlators.....	do.....	75	17	Headlights.....	Lamps and Gas-Fittings.....	122	30
Roller.....	do.....	9	17	Head-rests.....	Railway Rolling-Stock.....	6	34
Roller—				(See Cars, passenger.)			
Inking attachment.....	do.....	41	17	Hearses.....	Carriages and Wagons.....	11	10
Inking attachment.....	do.....	100	17	Heaters.....	Driers.....	66	28
Mutlators.....	do.....	23	17	Heaters.....	Painting.....	7	31
Perforators.....	do.....	23	17	Heaters—			
Sealing-tools.....	do.....	44	17	Barrel.....	Stoves and Furnaces.....	59	19
Settable type-carrier.....	do.....	39	17	Curling-iron.....	do.....	22	19
Settable type-carrier—				Dish.....	do.....	13	19
Clock-set.....	do.....	55	17	Electric.....	do.....	151	19
Inking attachment.....	do.....	53	17	Electric—			
Tumblers.....	do.....	51	17	Pressing and ironing.....	do.....	14	19
Hanging-baskets.....	Trees, Plants, and Flowers.....	17	1	Flat-iron.....	do.....	150	19
Hanks, cringles, and hoops.....	Ships.....	101	22	Frictional.....	do.....	8	19
Harbors.....	Hydraulic Engineering.....	5	4	Lunch.....	do.....	71	19
Hardening apparatus.....	Annealing and Tempering.....	31	3	Solar.....	do.....	25	19
Hardening apparatus—				Soldering-iron.....	do.....	114	19
Bands and wire.....	do.....	38	3	Heaters and driers.....	Photography.....	6	6
Clamps.....	do.....	34	3	Heating-drums.....	Stoves and Furnaces.....	386	19
Hardening processes.....	do.....	48	3	Heating feed-water—			
Hardening processes—				Furnace-gases.....	Steam-Boilers.....	251	18
Molten metal.....	do.....	2	3	Steam.....	do.....	266	18
Solutions.....	do.....	51	3	Steam-injected.....	do.....	299	18
Hard rubber.....	Caoutchouc and Minor Plas- tics.....	61	15	Heating systems—			
Harmonicas.....	Music.....	31	5	Air.....	Stoves and Furnaces.....	64	19
Harmonica-supports.....	do.....	9	5	Air, steam or water.....	do.....	13	19
Harmonic attachments.....	do.....	17	5	Car—			
Harmonic dampers.....	do.....	7	5	Air.....	do.....	160	19
Harmonic dampers—				Steam.....	do.....	9	19
Violin.....	do.....	9	5	Water.....	do.....	79	19
Harmony and transposi- tion charts.....	do.....	38	5	Local—			
Harmony-charts.....	do.....	38	5	Air.....	do.....	33	19
Harness.....	Harness.....	400	11	Steam.....	do.....	51	19
Harness—				Water.....	do.....	33	19
Attachments.....	do.....	600	11	Steam.....	do.....	80	19
Machines.....	do.....	200	11	Train—			
Pads.....	do.....	200	11	Air.....	do.....	79	19
Saddles.....	do.....	600	11	Smoke.....	do.....	7	19
Tools.....	do.....	75	11	Steam.....	do.....	117	19
Harpoons and spears.....	Fishing and Trapping.....	15	22	Water.....	do.....	18	19
(See Fishing, harpoons and spears.)				Water—			
Harpe.....	Music.....	24	5	Steam.....	do.....	52	19
Harpe and hangers.....	Lamps and Gas-Fittings.....	302	30	Water.....	do.....	35	19
Harrows.....	Harrows and Diggers.....	388	1	Hedge-training.....	Weaving.....	12	19
Harrows—				Hedge-trimmers.....	do.....	42	21
Changeable-form.....	do.....	22	1	Heel-machines.....	do.....	84	21
Disk.....	do.....	246	1	Heel-nailing machines.....	do.....	14	14
Expandable.....	do.....	90	1	Heels.....	Wire-Working.....	14	14
Flexible.....	do.....	68	1	Heel-stiffener machines.....	Trees, Plants, and Flowers.....	69	1
Revolving.....	do.....	71	1	Height-measurers.....	Harvesters.....	78	7
Rotary.....	do.....	159	1	Helical tools.....	Boots and Shoes.....	320	11
Spring-tooth.....	do.....	90	1	Helostats.....	do.....	400	11
Tooth-cleaners.....	do.....	20	1	Hemmers.....	do.....	400	11
Wheel.....	do.....	189	1		do.....	210	11
Wheel—					Coin-Controlled Apparatus.....	4	14
Rotary.....	do.....	45	1		Hides, Skins, and Leather.....	61	31
					Optics.....	22	30
					Sewing-Machines.....	166	24

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Hemp and flax harvesters.	Harvesters	34	7	Horseshoe-machines	Chains, Staples, and Horseshoes.	273	13
Hemp, flax, and hair.	Spinning	89	21	Horseshoe-nail—	Nails and Spikes	133	13
Hermetic sealing.	Packing and Storing Vessels	57	32	Blank-finishing	do	71	13
(See Metallic vessels, hermetic sealing.)				Cutting	do	152	13
Hinges	Builders' Hardware	58	20	Forging	Hose and Belting	270	41
Hinges	Hardware-Making	70	13	Hose and tubing	Railways	63	4
Hinges—				Hose-bridges	Carriages and Wagons	85	10
Awning-blind	Builders' Hardware	20	20	Hose-carriages	Hose and Belting	60	11
Box	do	56	20	Hose-machines	Water-Distribution	43	9
Coach	do	22	20	Hose-patches	Stoves and Furnaces	171	19
Concealed	do	25	20	Hot-air registers			
Door	do	81	20	Hot-blast ovens—			
Door—				Double-surface	Metallurgy	71	3
Butt	do	100	20	Single-surface	do	72	3
Strap	do	56	20	Hot-blast valves	do	28	3
Flush	do	28	20	Honnds	Carriages and Wagons	51	10
Gate	do	110	20	Household, sifters and screes.	Mills	669	25
Lock—				Houses and kilns	Driers	251	28
Frictional	do	9	20	Houses, apartment	Masonry	29	4
Positive	do	230	20	Hub-attaching devices.	Carriages and Wagons	392	10
Longitudinally-adjust- able.	do	13	20	Hub-caps	do	45	10
Safe	do	17	20	Hubs	do	726	10
Spring	do	251	20	Hydrants and plugs	Water-Distribution	628	9
Table	do	31	20	Hydraulic motors for ele- vators.	Hydraulic Motors	432	9
Vertically-adjustable	do	13	20	Hydraulic propellers	Marine Propulsion	75	22
Hitching-posts and ties.	Care of Live Stock	123	2	Hydrogen	Gas	84	31
Hitching-straps.	Harness	100	11	Hydrogen-platinum lights	Lamps and Gas-Fittings	18	30
Hobby-horses.	Games and Toys	110	7	Hydrometers	Measuring-Instruments	29	23
Hoes	Harrows and Diggers	111	1	Hygrosopes	do	18	23
Hoes—				Ice boats and breakers	Ships	37	22
Adjustable	do	27	1	Ice-cream freezers	Refrigeration	205	28
Compound	do	74	1	Ice-cream freezers—			
Compound—				External freezing	do	59	28
Adjustable	do	13	1	Ice-creepers	Boots and Shoes	160	11
Horizontal	do	52	1	Ice-crushers	Mills	32	25
Horizontal—				Ice-machines	Refrigeration	491	28
Adjustable	do	17	1	Ice picks and shavers	Mills	83	25
Interchangeable	do	26	1	Idle-pulley supports	Journal-Boxes, Pulleys, and Shafting.	21	12
Toothed blades	do	12	1				
Weeding	do	13	1	Igniting devices—			
Hoes and shovels	Tools and Implements. Making	155	13	Automatic	Electricity. Special Appli- cations.	147	16
Hog-scraping machines	Butchering	31	25	Inductional	do	28	16
Hoisting-buckets	Hoisting	127	12	Manual	do	141	16
Hoists	Fire Escapes and Ladders	41	4	Portable	do	35	16
Hoists—				Implements	Firearms	143	22
Fixed guides	do	43	4	Implements	Refrigeration	132	28
Movable guides	do	17	4	Implements	Ships	82	22
Pulley-block	do	50	4	Incandescent	Electric Lighting	310	16
Reciprocating cages	do	26	4	Incandescent—			
Shooting-spar	do	34	4	Special features	do	228	16
Trolley	do	44	4	Stopper	do	89	16
Holdbacks	Carriages and Wagons	198	10	Inclined planes	Railways	71	4
Holders	Gas	67	31	Inclined planes—			
Holders—				Traction	do	34	4
Brush-head	Brushing and Scrubbing	20	27	Incubation	Steam-Boilers	53	18
Convertible mop and brush.	do	29	27	Incubators	Care of Live Stock	129	2
Copy	Stationery	144	5	Indenting and filling ma- chines.	Painting	5	31
Mop-heads	Brushing and Scrubbing	150	27	Independent - reservoir lamps.	Lamps and Gas-Fittings	324	30
Pen	Stationery	241	5	Indexing	Bookbinding	149	5
Hollow augers	Woodworking-Tools	23	29	Indexing—			
Hollow grates—				Card-catalogues	do	9	5
Air	Steam-Boiler Furnaces	67	18	Index-wheel	Type-Writing Machines	137	30
Water	do	77	18	Indicators	Electric Signaling	57	16
Hollow piston-rod	Pumps	175	9	Indicators	Music	6	5
Hollow-tile walls	Masonry	12	4	Indicators	Signals	75	22
Hoof and shoe spreaders	Farriery	74	14	Indicators	Steam-Boilers	333	18
Hoof-cleaners and trim- mers.	do	68	14	Indicators—			
Hoof-pads	do	156	14	Barber's turn	Signals	8	22
Hooks	Clasps, Buckles, and Buttons	600	11	Fluid-pressure-brake piston-indicators.	Railway-Brakes	6	34
Hooks and eyes	do	300	11				
Hoop-drivers	Coopering	70	29	Game-counters	Signals	92	22
Hoops and clasps	Crinoline and Corsets	89	24	Identity	do	6	22
Hoop-skirts	do	156	24	Office	do	13	22
Hoops. Trundles and	Games and Toys	9	7	Peg	do	14	22
Hop-culture	Trees, Plants, and Flowers	53	1	Rotary	do	99	22
Hopples	Care of Live Stock	120	2	Sliding	do	42	22
Horse-boots	Harness	100	11	Station	do	358	22
Horse-collars	do	400	11	Station	Electric Signaling	29	16
Horse-detachers	Carriages and Wagons	408	10	Induction-coils	Coin-Controlled Apparatus	26	14
Horse-rakes				Induction-coils	Electricity. Generation	91	26
Draft dumpers	Harvesters	341	7	Inductoriums, trans- formers, rotary.	do	28	26
Drags	do	119	7	Ingots and piles—			
Hand-dumpers	do	391	7	Bar	Metal-Welding	82	13
Hay-cockers	do	32	7	Beam	do	20	13
Rake-teeth	do	98	7	Plate	do	51	13
Side-delivery	do	25	7	Rail	do	37	13
Horseshoe-bars. Mak- ing	Chains, Staples, and Horse- shoes.	106	13	Tube	do	14	13
Horseshoe-calks. Mak- ing	do	114	13	Inhalers and respirators	Surgery	305	6
				Inhalers and respirators— Mask	do	52	6

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Injectors and ejectors.....	Injectors and Ejectors.....	540	18	Kaleidoscopes.....	Optics.....	15	30
Inking apparatus.....	Printing.....	80	17	Keyboard attachments, exercising devices.	Music.....	17	5
Inking apparatus—	.....do.....	30	17	Keyboard, exercising devices.	.....do.....	14	5
Composition rollers, making and preserving.	.....do.....	52	17	Keyboards.....	Type-Writing Machines.....	36	30
Fountains.....	.....do.....	39	17	Keyboards and keys.....	Music.....	85	5
Pads and holders.....	.....do.....	22	17	Keyboard self-playing attachments.	.....do.....	44	5
Rollers.....	.....do.....	27	17	Keyed zithers.....	.....do.....	6	5
Rollers—	.....do.....	22	17	Key-fasteners.....	Locks and Latches.....	82	20
Compositions.....	.....do.....	51	17	Key-fasteners—	.....do.....	39	20
Traveling doctor-plate.....	.....do.....	31	31	Key-holding devices.....	Music.....	9	5
Traveling roller and plate.	.....do.....	48	31	Keyhole-guards.....	Locks and Latches.....	47	20
Inks—	Stationery.....	495	5	Keyhole-guards—	.....do.....	66	20
Copying and sensitive.....	.....do.....	121	22	Sliding and pivoted.....	Metal Turning, Planing, and Milling.....	46	13
Printing.....	.....do.....	115	22	Key-seat cutters.....	.....do.....	139	30
Writing.....	.....do.....	3	22	Key-wheel.....	Type-Writing Machines.....	88	20
Inkstands.....	Fishing and Trapping.....	141	22	Keys.....	Locks and Latches.....	120	16
Insect-destroyers—	.....do.....	25	8	Keys and keyboards.....	Telegraphy.....	85	5
Catchers.....	.....do.....	44	6	Keys and keyboards—	.....do.....	10	5
Fumigators.....	Furniture.....	153	15	Touch-regulators.....	Carriages and Wagons.....	58	10
Moth-exterminators.....	Medicines.....	325	26	King-bolts.....	Furniture.....	168	8
Powder-dusters.....	Caoutchouc and Minor Plastics.	14	5	Kitchen-cabinets.....	Games and Toys.....	26	7
Insect-guards.....	Electricity. Conductors.....	31	4	Kites.....	Accouterments.....	32	32
Insecticides.....	Music.....	14	5	Knapsacks and haversacks.	.....do.....	56	32
Insulating compounds.....	Railways.....	13	4	Knapsack-slings.....	Music.....	7	5
Insulators.....	.....do.....	23	4	Knee-swells.....	Stationery.....	49	5
Insulators.....	.....do.....	14	4	Knife-erasers.....	.....do.....	85	21
Interlocking.....	.....do.....	34	4	Knitting and netting—	Knitting and Netting.....	163	21
Interlocking—	.....do.....	27	4	Circular, circular machines.	.....do.....	241	13
Rods.....	.....do.....	326	6	Straight, straight machines.	Cutlery.....	49	13
Selectors.....	Medicines.....	24	25	Knives.....	.....do.....	54	13
Stands.....	Butchering.....	50	18	Knives—	.....do.....	205	13
Stands—	Steam-Boilers.....	75	15	Gage.....	Locks and Latches.....	61	20
Catch.....	Paving.....	48	3	Hay.....	.....do.....	19	20
Plunger.....	Metallurgy.....	34	2	Pocket.....	.....do.....	69	20
Internal remedies.....	.....do.....	32	3	Knob attachments.....	.....do.....	45	20
Intestine-cleaners.....	.....do.....	18	3	Key-fastener.....	.....do.....	41	20
Introducing smoke and gases.	.....do.....	12	3	Screw-spindle.....	.....do.....	22	20
Iron.....	Laundry.....	19	3	Set-screw and pin-fastener.	.....do.....	30	20
Iron and steel direct.....	.....do.....	267	27	Spring-fastener.....	.....do.....	105	20
Iron and steel direct—	Coating with Metal.....	434	27	Wedge-fastener.....	.....do.....	36	20
Apparatus.....	.....do.....	94	3	Knob-roses.....	Paper-Manufactures.....	46	17
Bricks.....	Wood-Turning.....	132	29	Knobs.....	.....do.....	65	17
Flux.....	Water-Distribution.....	422	9	Knob-spindle fasteners.....	.....do.....	20	17
Gases.....	Weaving.....	80	21	Label-affixers.....	.....do.....	37	17
Retorts and hearths.....	Iron Structures.....	82	4	Cutter and plunger.....	.....do.....	33	17
Slag.....	Painting.....	27	31	Label-runway machines.	.....do.....	14	17
Sponge.....	Kitchen and Table Articles.....	62	8	Label-runway machines—	.....do.....	46	17
Ironing-machines.....	Packing and Storing Vessels.....	123	32	Label-bed.....	Advertising.....	60	32
Ironing-tables.....	.....do.....	7	20	Magazine.....	.....do.....	40	32
Iron oxides.....	Dentistry.....	10	4	Pickers.....	.....do.....	35	32
Irregular forms.....	Hydraulic Engineering.....	84	14	Label and tag machines.....	.....do.....	13	32
Irrigating and sprinkling.....	Wire-Working.....	121	29	Label-holders.....	.....do.....	40	32
Jacquard mechanism.....	Coopering.....	447	12	Label-holders—	.....do.....	15	32
Jails.....	Journal-Boxes, Pulleys, and Shafting.	83	12	Clip.....	.....do.....	50	32
Japanning.....	.....do.....	180	12	Freight-car.....	.....do.....	176	17
Jar-lifters.....	.....do.....	155	12	Hat.....	.....do.....	154	17
Jars.....	.....do.....	139	12	Slide.....	.....do.....	15	32
(See Glass and pottery, jars.)	.....do.....	222	12	Street-car.....	.....do.....	15	32
Jaw-braces.....	.....do.....	27	12	Labels.....	Paper-Manufactures.....	50	32
Jetties, sectional.....	.....do.....	38	12	Labels, attaching.....	.....do.....	176	17
Joining.....	.....do.....	47	12	Lace paper. Perforating and	.....do.....	154	17
Joining staves.....	.....do.....	27	12	Lactometers.....	Measuring-Instruments.....	15	23
Journal-boxes.....	.....do.....	121	12	Ladders.....	Fire Escapes and Ladders.....	22	4
Journal-boxes—	.....do.....	132	12	Ladders (See Cars, sleeping.)	Railway Rolling-Stock.....	10	34
Brasses.....	.....do.....	147	12	Ladders—	.....do.....	9	4
Compositions.....	.....do.....	41	12	Collapsible.....	.....do.....	69	4
Guards.....	.....do.....	96	12	Escape.....	.....do.....	75	4
Lids.....	.....do.....	360	12	Balcony.....	.....do.....	32	4
Lubricating.....	.....do.....	75	12	Fixed.....	.....do.....	13	4
Lubricating—	.....do.....	77	32	Mounting.....	.....do.....	164	4
Band-applying.....	.....do.....	8	30	Sectional hand.....	.....do.....	23	4
Centrifugal.....	.....do.....	8	30	Shooting and truck.....	.....do.....	58	4
Coolers.....	.....do.....	8	30	Trolley.....	.....do.....	17	4
Roller applying.....	.....do.....	8	30	Extension.....	.....do.....	86	4
Roller-applying—	.....do.....	8	30	Feet.....	.....do.....	87	4
Elastically supported.	.....do.....	8	30	Flexible.....	.....do.....	90	4
Yieldably-supported pads.	.....do.....	8	30	Flexible—	.....do.....	22	4
Roller-bearings—	.....do.....	8	30	Reel.....	.....do.....	22	4
Ball.....	.....do.....	8	30	Sectional.....	.....do.....	22	4
Ball and cylinder.....	.....do.....	8	30	Sectional—	.....do.....	22	4
Cylinder.....	.....do.....	8	30	Elevator.....	.....do.....	22	4
Cylinder—	.....do.....	8	30	.....do.....	.....do.....	22	4
Circular series.....	.....do.....	8	30	.....do.....	.....do.....	22	4
Thrust-bearings.....	.....do.....	8	30	.....do.....	.....do.....	22	4
Jugs. Bottles and.....	.....do.....	8	30	.....do.....	.....do.....	22	4
(See Glass and pottery, bottles and jugs.)	.....do.....	8	30	.....do.....	.....do.....	22	4
Justifying devices.....	.....do.....	8	30	.....do.....	.....do.....	22	4

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Ladders—				Leaves and covers	Book binding	28	5
Flexible—				Leg-joints	Artificial Limbs	8	20
Single-stile	Fire Escapes and Ladders	34	4	Legs	do	193	20
Trolley	do	11	4	Legs—			
Hooks	do	16	4	Piano	Music	3	5
Jacks	do	33	4	Lenses	Optics	58	30
Sectional	do	35	4	Letter-box bells	Signals	31	22
Step	do	385	4	Letter-boxes	Packing and Storing Vessels	17	32
Step—				Letter-boxes—			
Store-service	do	26	4	Chutes—			
Stops	do	85	4	Discharge	do	10	32
Trussed	do	10	4	Double-trap	do	12	32
Ladles	Kitchen and Table Articles	17	8	Receiving	do	25	32
Lamp attachments	Lamps and Gas-Fittings	27	30	Receiving—			
Lampblack	Painting	78	31	Rotary	do	25	32
Lamp-boxes	Lamps and Gas-Fittings	25	30	Detachable receptacle	do	22	32
Lamp-burners	do	781	30	House	do	18	32
Lamp-burners—				House—			
Argand	do	129	30	Closures	do	12	32
Multiple-wick	do	73	30	Closures—			
Lamp-lighting attach-	do	74	30	Bottom	do	13	32
ments				Pivoted-body	do	30	32
Lamps	do	60	30	Sliding	do	10	32
Lamps—				Collection and deliv-	do	25	32
Bicycle	do	24	30	ery			
Bracket	do	35	30	Door-jamb lock	do	10	32
Carriage	do	30	30	Name-plate	do	23	32
Cigar-lighting	do	25	30	Package	do	18	32
Flash	do	29	30	Package—			
Forced-draft	do	68	30	Locking	do	5	32
Independent-reservoir	do	324	30	Signal	do	23	32
No-chimney	do	106	30	Indicators	do	25	32
Special	do	91	30	Parcel	do	27	32
Street	do	157	30	Leveling-instruments	Optics	93	30
Lampwork	Sheet-Metal Ware. Making	12	14	Levels—			
Land-markers	Seeders and planters	162	1	Plumb	Measuring-Instruments	102	23
Land-rollers	Harrows and Diggers	47	1	Spirit	do	154	23
Land-rollers—				Lewis	Hoisting	7	12
Furrows and markers	do	32	1	Life boats and rafts	Boats	268	22
Pivoted	do	71	1	Life-preservers	do	152	22
Weighted cylinders	do	19	1	Lift	Pumps	422	9
Weighted frames	do	18	1	Lift and force	do	113	9
Landsides	Plows	40	1	Lifters—			
Lantern-holders	Lamps and Gas-Fittings	82	30	Barrel and box	Hoisting	22	12
Lanterns	do	440	30	Picture	do	12	12
Lanterns—				Spittoon	do	10	12
Dark	do	12	30	Spool	do	9	12
Signal	do	110	30	Store goods	do	28	12
Submarine	do	14	30	Lifting-jacks	do	44	12
Tubular	do	305	30	Lifting-jacks—			
Lapping	Carding	22	21	Bar and cam-lever	do	83	12
Lard-coolers	Refrigeration	48	28	Lover	do	270	12
Laryngoscopes	Surgery	7	6	Lever and lifting-bar	do	311	12
Lasting and lasting-tools	Boots and Shoes	160	11	Lever, bar, and clutch-	do	82	12
Lasting-machines	do	500	11	loop			
Lasts	do	400	11	Lever, bar, and double-	do	55	12
Latches and locks com-	Locks and Latches	263	20	acting pawls			
bined				Lever, bar, and pawl	do	108	12
Latches—				Rack and pinion	do	94	12
Automatic detent	do	19	20	Screw	do	170	12
Gate	do	237	20	Light and air ports	Ships	31	22
Gravity	do	61	20	Lighting implements	Lamps and Gas-Fittings	104	30
Lifting	do	100	20	Lighting systems	do	6	30
Lifting—				Lighting-arresters	Telegraphy	50	16
Hooked ends	do	51	20	Lighting-arresters—			
Pivoted ends	do	55	20	Magnetic	do	53	16
Reversible	do	166	20	Thermal	do	33	16
Sliding	do	250	20	Lighting-rods	Electricity. Conductors	251	26
Swinging	do	48	20	Lights—			
Lath and chain	Driers	22	28	Arc—			
Lathe appliances	Wood-Turning	76	29	Gravity-feed	Electric Lighting	32	16
Lathe-chucks	Metal Turning, Planing, and	224	13	Gravity-feed—			
	Milling			Clutch	do	59	16
Lathing	Carpentry	61	29	Double dog-clutch	do	81	16
Lathing	Iron Structures	79	4	Gear-clutch	do	89	16
Lathing—				Pivot dog-clutch	do	93	16
Wire	do	50	4	Ring-clutch	do	140	16
Laundries	Laundry	18	27	Positive-feed	do	19	16
Lawn-mowers	Harvesters	293	7	Positive-feed—			
Lawn-mowers—				Clutch	do	27	16
Grass-catchers	do	60	7	Electric gear-clutch	do	34	16
Lawn-tennis	Games and Toys	55	7	Gear-clutch	do	31	16
Lawn-vases	Trees, Plants, and Flowers	15	1	Step gear-clutch	do	55	16
Lazy-tongs	Fire Escapes and Ladders	108	4	Special features	do	174	16
Lead	Metallurgy	42	3	Christmas-tree	Lamps and Gas-Fittings	40	30
Lead and crayon holders	Stationery	260	5	Decorative	do	18	30
Lead-covered	Electricity. Conductors	56	26	Head	do	122	30
Lead salts	Painting	194	31	Hydrogen-platinum	do	18	30
Leaf-gilding	Fine Arts	30	5	Signal	do	26	30
Leaf-turners	Music	227	5	Light-signals	Railways	66	4
Leaf-alarms	Signals	19	22	Lime-kilns	Artificial Stone, Lime, and	210	15
Leaf-stoppers	Ships	24	22		Cement		
Lease-formers	Cordage	7	21	Lining	Metal-Tube Manufacture	15	13
Leather-measuring	Measuring-Instruments	17	23	Linotype-making	Linotyping	15	30
Leather-workers' hard-	Hardware-Making	77	13	Linotypes	do	4	30
ware				Liquid sterilizers	Stoves and Furnaces	15	19
Leaves	Bookbinding	174	5	Loading	Ordnance	22	22

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Loading and unloading ..	Hoisting.....	74	12	Locomotives—			
Loading and unloading—				Telescoping pilots	Railway Rolling-Stock.....	11	34
Hay	do	75	12	Traction-increasers	do	29	34
Hoist and dump	do	24	13	Traction-increasers—			
Hoist, raised track, and	do	54	12	Electric	do	11	34
dump	do	37	12	Gripping-drivers	do	11	34
Load-binders	do	59	12	Logging	Railways	28	4
Pilers	do	52	12	Log-turners	Wood-Sawing	129	29
Raised track	do	28	12	Looms—			
Raised track—				Bag	Weaving	18	21
Track-end dump	do	26	12	Basket	do	6	21
Track-end dump—				Buttonhole	do	5	21
Tilting track-section.	do	84	12	Circular	do	44	21
Shoveling devices	do	90	12	Hair-cloth	do	33	21
Tilting platform	do	124	12	Hand	do	8	21
Vertical hoist and dump	do	33	34	Irregular	do	10	21
Load-regulated	Railway-Brakes	29	14	Lappet	do	291	21
Loan-receptacles	Coin-Controlled Apparatus	57	5	Looms	do	38	21
Lockets	Jewelry	47	20	Narrow-ware	do	31	21
Lock-strikes	Locks and Latches	29	20	Needle	do	7	21
Lock-strikes—				Pile-fabric—			
Electric	do	137	20	Longitudinal wires	do	82	21
Lock-trimmings	do	253	22	Pile-fabric	do	45	21
Locks	Firearms	118	20	Pile-wire motions	do	14	21
Locks	Locks and Latches	29	22	Pile-wires	do	17	21
Locks	Ordnance	15	7	Terry	do	40	21
Locks	Velocipedes	96	20	Tufted	do	43	21
Locks—				Slat, cane, and straw	do	32	21
Alarm	Locks and Latches	13	20	Swivel	do	22	21
Alarm—				Wire	do	47	15
Detonating	do	68	20	Lozenge-machines	Bread, Cracker, and Lozenge		
Bag	do	25	20	Lubricants	Making	23	13
Bicycle	do	22	20	Lubricants	Metal-Drawing	220	31
Car-seat	do	158	20	Lubricating	Oils, Fats, and Glue	8	22
Cylinder	do	34	20	Lubricators	Projectiles	69	17
Cylinder—				Lubricators—	Steam-Engines	45	2
Knob	do	16	20	Capillary attraction	Lubricators	341	2
Multiple-key	do	45	20	Condensation displacement.	do	332	2
Electric	do	20	20	Force-feed	do	428	2
Electric—				Gravity-feed	do	116	2
Combination	do	11	20	Gravity-feed—			
Time	do	11	5	Automatic cut-off	do	40	2
For pedals	Music	72	20	Liquefiers	do	107	2
Hasp	Locks and Latches	28	20	Miscellaneous	do	58	7
Indicator	do	26	20	Luggage-carriers	Velocipedes	48	10
Multiple-bolt	do	7	20	Lumber-wagons	Carriages and Wagons	5	30
Multiple-key	do	16	20	Machine attachments	Linotyping	315	12
Adjustable tumbler	do	17	20	Machine-brakes	Machine Elements	35	12
Master-key	do	11	20	Machine-brakes—			
Primary and secondary	do	10	20	Strap	do	143	22
key	do	44	20	Machine-guns	Ordnance	99	13
Trap	do	53	20	Machine-needles	Needles and Pins	22	11
Piano	do	13	20	Machine-needles. Mak-	Leather-Working Machin-		
Pin	do	120	20	ing	ory	47	15
Pin—				Machines	Cautchouc and Minor Plas-		
Multiple-key	do	209	20	Machines for coating	tics	91	29
Pivoted-tumbler	do	18	20	Machine-tables	Woodworking-Machines	72	30
Seal	do	49	20	Machine-tables	Optics	34	
Seal—				Magic lanterns	Railway-Brakes		
Seals	do	51	20	Magnetic clutch			
Sliding-door	do	7	20	(See Electric.)			
Sliding-tumbler	do	14	20	Magneto-electric—			
Systems of locks	do	146	20	Armatures—			
Till	do	72	20	Disk	Electricity. Generation	23	26
Time	do	63	20	Drum	do	182	26
Trunk	do	41	20	Pole	do	18	26
Trunk—				Ring	do	196	26
Swinging-hasp	do	55	20	Bipolar	do	259	26
Tumbler and dog	do	263	20	Brushes and holders	do	134	26
Without tumblers	do			Commutators and col-	do	136	26
Locks and latches com-	do			lectors	do	35	26
bined				Connecting devices	do	85	26
Locomotive	Steam-Engines	107	18	Hand-machines	do	224	26
Locomotive—				Multipolar	do	26	26
Connected series	Railway-Brakes	21	34	Uniform field	do		
Locomotives	Railway Rolling-Stock	111	34	Mail-bag delivery—			
Locomotives—				Car-forks	Railway Rolling-Stock	27	34
Belt-gearing	do	63	34	Catchers and cranes	do	70	34
Draw-bar lifters	do	11	34	Cranes	do	33	34
Electric	do	11	34	Mail-bags	Packing and Storing Vessels	15	32
Belt-gearing	do	12	34	Mail-bags—			
Friction-roller driven	do	20	34	Closures	do	33	32
Geared	do	8	34	Closures—			
Intermittent-grip	do	15	34	Angular frame	do	48	32
Longitudinal gear-	do	8	34	Flap	do	43	32
shafts	do			Flap—			
Longitudinal worm-	do	24	34	Corner folds	do	11	32
shafts	do	41	34	Sliding fastener	do	44	32
Friction-roller driven	Railway-Brakes	7	34	Turning fastener	do	17	32
Shoes between drivers	Railway Rolling-Stock	22	34	Pivoted-jaw	do	13	32
Intermittent-grip	do	8	34	Top slide	do	10	32
Longitudinal shafts	do	6	34	Label-holders	do	26	32
Rack-rail	do	40	34	Mail-marking machines	Printing	14	17
Side-track push-roads	Railway Draft Appliances			Mail-marking machines—			
Swinging bogie	Railway Rolling-Stock			Rotary	do	39	17

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Mail-marking machines—				Mechanical printing	Photography	87	6
Rotary machines and	Printing	21	17	Mechanical puddlers	Metallurgy	41	3
stackers.				Mechanical puddlers—			
Mains and pipes	Water-Distribution	362	9	Rotary hearths .....	.....do	17	3
Mallets	Woodworking-Tools	29	29	Tools .....	.....do	20	3
Malting apparatus	Alcohol	46	31	Mechanical telephones	Acoustics	175	23
Malting apparatus—				Mechanical treatment	Sewerage	14	9
Cylinders, rotary .....	.....do	20	31	Medals	Fine Arts	2	5
Malt-stirrers .....	.....do	23	31	Medical and surgical	Electricity. Medical and	29	26
Malting processes .....	.....do	13	31		Surgical		
Mandrels	Metal-Tube Manufacture	31	13	Medical spoons	Surgery	27	6
Mandrels and work-hold-	Metal Turning, Planing, and	142	13	Metal—			
ers.	Milling			Card-grinding	Grinding and Polishing	71	27
Mangles	Laundry	84	27	Curved surfaces .....	.....do	246	27
Manholes	Steam-Boilers	30	18	Cutlery-scourers .....	.....do	170	27
Manholes and catch-ba-	Sewerage	119	9	Edge-tools .....	.....do	432	27
sins.				Metallic	Roofing	130	29
Mantels	Carpentry	25	29	Metallic—			
Mauve-forks	Harvesters	38	7	Sheathing	Iron Structures	107	4
Mauve-pouches	Care of Live Stock	13	2	Shingle	Roofing	138	29
Many-spindle lathes	Wood-Turning	31	29	Standing-seam .....	.....do	78	29
Maps	Educational Appliances	35	31	Vessels—			
Marine torpedoes	Projectiles	44	22	Boxes	Packing and Storing Vessels	88	32
Marine ways	Hydraulic Engineering	32	7	Boxes—			
Marking-machines	Printing	61	14	Bleaching .....	.....do	45	32
Marking-machines—				Compartment .....	.....do	46	32
Rotary .....	.....do	43	17	Knockdown .....	.....do	34	32
Marquetry	Carpentry	54	29	Pocket .....	.....do	61	32
Mashing				Canisters .....	.....do	118	32
Apparatus	Alcohol	9	31	Cans and unclassified	.....do	327	32
Apparatus—				vessels.			
Digesters and disin-	.....do	46	31	Cans and unclassified			
tegrators .....	.....do			vessels—			
Fore-mashers .....	.....do	18	31	Single-blank .....	.....do	26	32
Mash-tubs .....	.....do	30	31	Casks .....	.....do	66	32
Mash-tubs—				Closures .....	.....do	123	32
Rakes .....	.....do	50	31	Closures—			
Tubular rakes .....	.....do	22	31	Clamp .....	.....do	72	32
Hops .....	.....do	22	31	Screw-cap .....	.....do	29	32
Processes .....	.....do	80	31	Screw-stopper .....	.....do	21	32
Wort .....	.....do	4	31	Seam or solder .....	.....do	152	32
Wort—				Seam or solder—			
Hopping .....	.....do	22	31	Rip .....	.....do	106	32
Purifying .....	.....do	17	31	Swing-cover .....	.....do	29	32
Masts and spars	Ships	144	22	Coal-scuttles .....	.....do	170	32
Match-boxes—				Ears and hails .....	.....do	126	32
Igniting	Lamps and Gas-Fittings	61	30	Garbage receptacles .....	.....do	45	32
Single-delivery .....	.....do	31	30	Garbage-receptacles—			
Matches	Explosives	61	6	Bucket .....	.....do	53	32
Match-safes	Lamps and Gas-Fittings	120	30	Pivoted .....	.....do	21	32
Match-splints	Woodworking-Machines	64	29	Handles .....	.....do	55	32
Match-trays .....	.....do	87	29	Hermetic sealing .....	.....do	57	32
Materials	Paper-Making	79	15	Jackets .....	.....do	109	32
Matrices	Dentistry	14	20	Jackets—			
Mats	Carpentry	88	29	Cask .....	.....do	18	32
Mats—				Package .....	.....do	59	32
Metallic .....	.....do	27	29	Stand .....	.....do	16	32
Wire .....	.....do	40	29	Jackets and stands .....	.....do	66	32
Mattresses	Beds	86	8	Swing			
Measures—				Linings .....	.....do	30	32
Rotary	Measuring-Instruments	60	23	Milk-cans .....	.....do	160	32
Scale .....	.....do	130	23	Nozzles and vents .....	.....do	43	32
Shoemakers' .....	.....do	19	23	Nozzles and vents—			
Speed .....	.....do	98	23	Screw .....	.....do	19	32
Tailors' .....	.....do	157	23	Screw-cap .....	.....do	47	32
Tape .....	.....do	76	23	Valve .....	.....do	61	32
Measuring-faucets .....	.....do	174	23	Valve-screw .....	.....do	71	32
Measuring-pumps .....	.....do	42	23	Paint-tubes, collapsi-	.....do	11	32
Measuring-vessels .....	.....do	434	23	ble.			
Meat-clamps	Butchering	21	25	Spouted .....	.....do	127	32
Meat-cutters—				Spouted—			
Cracklings .....	.....do	3	25	Feeders .....	.....do	273	32
Crank mechanism .....	.....do	116	25	Feeders—			
Cube .....	.....do	23	25	Piston .....	.....do	42	32
Cylinder and block .....	.....do	44	25	Storage .....	.....do	63	32
Cylinder and concave .....	.....do	153	25	Transport .....	.....do	68	32
Double-cylinder .....	.....do	11	25	Vessels, baskets, and	.....do	45	32
Hand .....	.....do	43	25	crates.			
Rocking-knife .....	.....do	25	25	Metalloids	Chemicals	136	6
Slicers .....	.....do	74	25	Metal molds—			
Trip mechanism .....	.....do	42	25	Apparatus and plants	Metal-Founding	35	3
Meat-mixers .....	.....do	9	25	Chains, hinges, and	.....do	10	3
Meat-tenderers—				joints.			
Hand .....	.....do	50	25	Hardware .....	.....do	68	3
Pivoted-head .....	.....do	17	25	Hollow ware .....	.....do	62	3
Rotary .....	.....do	55	25	Ingots .....	.....do	86	3
Mechanical	Dentistry	143	20	Ingots—			
Mechanical motors—				Compound .....	.....do	123	3
Horse-powers	Mechanical Motors	573	2	Hollow and tube .....	.....do	34	3
Horse-powers—				Plants .....	.....do	118	3
Equalizers .....	.....do	46	2	Strippers .....	.....do	15	3
Treads .....	.....do	201	2	Ladles .....	.....do	48	3
Mannal .....	.....do	225	2	Materials .....	.....do	25	3
Miscellaneous .....	.....do	151	2	Ordinance and project-	.....do	7	3
Spring .....	.....do	383	2	iles.			
Weight .....	.....do	196	2	Pigs .....	.....do	10	3
Mechanical movements ..	Machine Elements	345	12	Plows .....	.....do	7	3

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Metal molds—				Mitering-saw	Woodworking-Machines ...	185	29
Rolls	Metal-Founding	25	3	Mixed paints—			
Screw-threads	do	9	3	Alkali	Painting	110	31
Soft-metal machines	do	61	3	Barrel-linings	do	54	31
Soft-metal machines—				Oil	do	163	31
Molds	do	71	3	Rubber	do	69	31
Shot	do	4	3	Tar	do	87	31
Spoons	do	10	3	Vulcanized	do	26	31
Traps	do	27	3	Water	do	62	31
Type	do	39	3	Water—			
Tools	do	18	3	Soluble silicates	do	26	31
Vehicle-wheels	do	42	3	Mixers	Sugar and Salt	19	6
Wheels	do	10	3	Mixers and kneaders	Bread, Cracker, and Lozenge Making	178	15
Metal—				Moistening	Tobacco	67	2
Mower and reaper knives	Grinding and Polishing	199	27	Moldboards	Plows	140	1
Needle-eyes	do	20	27	Moldboards—			
Needles, rods, and points	do	44	27	Revolving	do	62	1
Ornamentation	Fine Arts	128	5	Molded molds—			
Plane surfaces	Grinding and Polishing	177	27	Chains, hinges, and joints	Metal-Founding	17	3
Rumbles	do	32	27	Hardware	do	53	3
Screw-machines	Metal Bolts, Nuts, Rivets, and Screws	152	13	Hollow ware	do	118	3
Sheet metal and wire	Grinding and Polishing	41	27	Molded molds	do	18	3
Stock and ornamental wire fabric	Jewelry	28	5	Molders' flasks	do	90	3
Strops, bones, and rifles	Grinding and Polishing	195	27	Molders' materials	do	59	3
Metal-working, electric	Metal-Welding	245	13	Molders' tools and arts	do	140	3
Meters	Electricity. Generation	258	26	Ordnance and project- iles	do	10	3
Meters—				Pipe-elbows	do	25	3
Air and gas	Measuring-Instruments	152	23	Pipes	do	74	3
Diaphragm	do	58	23	Pipes—			
Disk	do	35	23	Horizontal	do	11	3
Oscillating	do	104	23	Plants	do	15	3
Piston	do	276	23	Plows	do	40	3
Proportional	do	64	23	Rolls	do	13	3
Rotary	do	242	23	Screw-threads	do	11	3
Spirit	do	18	23	Tools	do	14	3
Methods	Sewing-Machines	73	24	Vehicle-wheels	do	140	3
Metronomes	Horology	9	23	Wheels	do	55	3
Microscopes	Optics	58	30	Molding apparatus—			
Milk-cans	Packing and Storing Vessels	160	32	Blacking-molds	do	11	3
(See Metallic vessels, milk-cans.)				Hollow ware	do	20	3
Milk-coolers—				Machines	do	171	3
Aerating	Dairy	23	2	Ordnance and project- iles	do	4	3
Creaming-cans	do	236	2	Pipe-cores	do	59	3
Creaming-cans—				Pipes	do	78	3
Agitators	do	6	2	Pipes—			
Depending-tube	do	31	2	Horizontal	do	8	3
Floats	do	8	2	Screw-threads	do	16	3
Vacuum creamers	do	12	2	Vehicle-wheels	do	14	3
Vertical-tube	do	63	2	Wheels	do	34	3
Milk-circulation	do	65	2	Molding—			
Vats	do	30	2	Axles	Woodworking-Machines	17	29
Vats—				Cigars	Tobacco	144	2
Air-circulation	do	16	2	Clamped-work	Woodworking-Machines	89	29
Horizontal-tube	do	13	2	Devices	Caoutchouc and Minor Plas- tics	117	15
Removable-pipe	do	30	2	Hand-feed	Woodworking-Machines	69	29
Milk-stools	do	51	2	Lateral-feed	do	50	29
Mill appliances	Metal-Rolling	226	13	Machines and articles	Paper-Making	207	15
Milling	Metal Turning, Planing, and Milling	139	13	Pattern-feed	Woodworking-Machines	199	29
Milling-cutters	do	47	13	Special-feed	do	114	29
Mills—				Straight-feed	do	196	29
Auxiliary saw	Wood-Sawing	17	29	Moldings	Carpentry	60	29
Circular-saw	do	42	29	Molds	Artificial Stone, Lime, and Cement	127	15
Reciprocating-saw	do	232	29	Molds	Dentistry	64	20
Reciprocating-saw—				Molds	Glass	397	15
Scroll	do	231	29	Molds and carriages	Sugar and Salt	34	6
Millstone-dressing ma- chines	Stone-Working	170	25	Monuments	Stone-Working	111	25
Millstone paint-staffs	do	55	25	Mops	Brushing and Scrubbing	9	27
Millstone-picks	do	31	25	Mop-wringers	do	133	27
Mining	Hydraulic Engineering	21	4	Mordants	Bleaching and Dyeing	49	6
Mining-machines	Stone-Working	379	25	Morse registers	Telegraphy	31	16
Mirrors	Furniture	62	8	Mortars	Ordnance	6	22
Mirrors—				Mortising—			
Bracket	do	27	8	Anger-cutters	Woodworking-Machines	62	29
Hand	do	42	8	Chisel and anger cut- ters	do	55	29
Multiple	do	52	8	Chisel-cutters	do	147	29
Stand	do	14	8	Rotary cutters	do	58	29
Window	do	26	8	Mosquito-nets and cao- pies	Beds	180	8
Miscellaneous	Acoustics	15	23	Motion of vessel	Marine Propulsion	12	22
Miscellaneous	Coin-Controlled Apparatus	23	14	Motor part along track	Electricity. Electric Rail- ways	19	26
Miscellaneous	Dentistry	39	20	Motors	Electricity. Motive-Power	346	26
Miscellaneous	Educational Appliances	51	31	Motors—			
Miscellaneous	Hardware-Making	139	13	Alternating	do	37	26
Miscellaneous	Harvesters	262	7	Alternating—			
Miscellaneous	Matrix-Making	1	30	Condensers	do	17	26
Miscellaneous	Surgery	197	6	Distorted field	do	18	26
Miscellaneous	Type-Writing Machines	12	30	Rotary field	do	34	26
Miscellaneous machines	Typotyping	5	30	Starters	do	22	26
Miscellaneous parts	Pumps	107	9	For elevators	Hydraulic Motors	432	9
Miscellaneous parts	Sewing-Machines	141	24				
Mitering-knife	Woodworking-Machines	66	29				

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Motors—				Nuts and washers—			
For jacks	Hydraulic Motors	52	9	Making	Metal Bolts, Nuts, Rivets, and Screws.	257	13
For presses	do	180	9	Nut-wrenches—			
Hand-operating devices	Electricity. Motive-Power.	155	26	Pivoted and spring jaw	Metal-Working Tools	73	14
Manually-operated	Railway Rolling-Stock	17	34	Ratchet-wheel	do	166	14
Mechanical, miscellaneous.	Mechanical Motors	151	2	Rigid-jaw	do	35	14
Reciprocating	Electricity. Motive-Power.	126	26	Rigid-socket and axle- nut.	do	85	14
Spring	Railway Rolling-Stock	16	34	Sliding-jaw	do	696	14
Tread-power	do	7	34	Wheel	do	59	14
Motor-vehicles	Carriages and Wagons	34	10	Oakum-machines	Brakes and Gins	10	21
Mounting	Photography	22	6	Oars and oar-locks	Boats	230	22
Month-mirrors	Dentistry	2	22	Obstetrics	Surgery	36	6
Monthpieces	Music	23	5	Obtunders	Dentistry	14	20
Mouthpieces	Tobacco	108	2	Odometers	Measuring-Instruments	101	23
Movement cure	Surgery	46	6	Oil	Gas	102	31
Movers—				Oil	Pumps	62	9
Anomalies	Harvesters	31	7	Oil and water	Gas	30	31
Center-cut	do	104	7	Oil and water—			
Front-cut				Generators—			
One wheel	do	60	7	Cupola	do	142	31
Two wheels	do	435	7	Refractory	do	30	31
Lawn	do	293	7	Retort	do	208	31
Rear-cut				Oil-dispensing tanks	Packaging and Dispensing Liquids.	29	32
One wheel	do	63	7				
Two wheels	do	269	7	Oil-dispensing tanks—			
Reciprocating-gear	do	153	7	Cabinet	do	14	32
Thrust-cut	do	86	7	Drawers	do	18	32
Mad guards, Dress and	Velocipedes	22	7	Drainers—			
Muffs and mufflers	Apparel	172	24	Pumps	do	35	32
Mules and jacks	Spinning	304	21	Pumps—			
Multicolor-machines	Printing	17	17	Inclosed	do	51	32
Multicolor-machines—				Followers	do	31	32
Bed and cylinder	do	11	17	Nozzles—			
Bed and cylinder—				Pivoted	do	7	32
Multiple impression	do	18	17	Suction	do	6	32
Bed and platen	do	53	17	Vent	do	6	32
Rotary	do	45	17	Pressure	do	5	32
Rotary—				Pressure—			
Multiple printing	do	29	17	Blow	do	10	32
couple				Bulb	do	16	32
Supplemental forms	do	22	17	Piston	do	16	32
Multiple-cylinder	Steam-Engines	243	18	Pump	do	17	32
Multiple-piston	do	59	18	Siphon	do	3	32
Multiplex	Telegraphy	82	16	Oil-distributors	Ships	28	22
Musical blocks	Music	8	5	Oil indicators and fillers	Lamps and Gas-Fittings	55	30
Musical-instrument work	Hardware-Making	21	13	Olivers	Metal-Forging	50	13
Music-boxes	Coin-Controlled Apparatus	7	14	Opener-heaters	Carding	17	21
Musicians' cases	Baggage	22	32	Opener-evening mechan- ism.	do	22	21
Mustache-guards	Toilet	39	24	Open rats	Bleaching and Dyeing	212	6
Mutes, Dampers and—				Open glasses	Coin-Controlled Apparatus	6	14
Violin	Music	33	5	Opera-glasses	Optics	54	30
Muzzle-loaders	Firearms	23	22	Operating	Ordnance	213	22
Nail and ear cleaners	Toilet	45	24	Operative	Dentistry	20	20
Nail-distributors	Nails and Spikes	41	13	Optometers	Optics	49	30
Nail-extractors—				Ore and coal—			
Claw	Woodworking-Tools	109	29	Coal-breakers	Mills	56	25
Nipper	do	142	29	Coal-breakers	do	217	25
Nail-heads, ornamental	Nails and Spikes	69	13	Ice-crushers	do	32	25
Nail-plate feeders	do	163	13	Ice picks and shavers	do	83	25
Nails and spikes	do	289	13	Separators—			
Napkin-holders	Kitchen and Table Articles	15	8	Dry	do	210	25
Napkin-supporters	Clasps, Buckles, and Buttons	75	11	Jiggers	do	99	25
Napping	Cloth-Finishing	102	21	Magnetic	do	171	25
Nasal donches	Surgery	13	6	Washers	do	799	25
Nautical signals	Signals	40	22	Sifters and screens	do	202	25
Necktie-fasteners	Clasps, Buckles, and Buttons	500	11	Stamps	do	267	25
Neckties	Apparel	209	24	Ore-detectors	Electricity. Special Appli- cations.	9	16
Neck-yokes	Carriages and Wagons	252	10	Organ-actions	Music	65	5
Needle-clamps	Sewing-Machines	40	24	Organ-actions—			
Needle holders and cases	Surgery	18	6	Electropneumatic	do	6	5
Needles	Apparel	62	24	Pneumatic	do	66	5
Needles	Knitting and Netting	65	21	Organ and piano, com- bined.	do	22	5
Needles	Sewing-Machines	70	24	Organ-bellows	do	48	5
Needle-threaders	Apparel	27	24	Organ-cases	do	59	5
Nether garments	do	339	24	Organic	Fertilizers	64	6
Netting	Knitting and Netting	36	21	Organ-pipes	Music	19	5
Newspaper-files	Bookbinding	119	5	Organs—			
Nippers	Metal-Working Tools	71	14	Pedal-bass	do	6	5
Nipples	Surgery	34	6	Pipe	do	35	5
Nipples and guards	Firearms	17	22	Reed	do	148	5
Nitro compounds	Explosives	195	6	Reed—			
Nose-rings and ring- ing-tools.	Care of Live Stock	112	2	With pipes	do	18	5
Notation	Music	25	5	Steam	do	4	5
Note-sheets for self-play- ing instruments.	do	17	5	Organ stop-actions	do	76	5
Nozzles	Water-Distribution	323	9	Organ-swells	do	30	5
Numbering-machines	Printing	89	17	Organ wind-chests	do	3	5
Numbering-machines—				Ornamental chains	Jewelry	166	5
Form attachment	do	27	17	Ornamental chains	Metal Personal Wear. Mak- ing	40	14
Hands	do	21	17	Ornamental wire fabric, &c.	Jewelry	28	5
Measurers and markers	do	15	17	Ornamentation	Glass	280	15
Nursing-bottles	Surgery	64	6	Ornamentation—			
Nut-crackers	Vegetable Cutters and Crush- ers.	35	25	Metal	Fine Arts	128	5
Nuts and washers	Metal Bolts, Nuts, Rivets, and Screws.	57	13				

SUB-CLASSES ALPHABETICALLY ARRANGED.

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Ornamenting	Metal-Ornamenting	22	14	Paper-damping ma-			
Ornamenting	Paper-Making	106	15	chines—			
Ornamenting cloth	Fine Arts	76	5	Winders	Printing	24	17
Oscillating	Hydraulic Motors	69	9	Paper-fasteners	Clasps, Buckles, and Buttons	150	11
Oscillating	Pumps	76	9	Paper-hanging machines	Paper-Making	62	15
Oscillating	Steam-Engines	187	18	Paper-making machines	do	310	15
Oscillating propellers	Marine Propulsion	99	22	Paper vessels—			
Osier-peelers	Woodworking-Machines	15	29	Bags	Packing and Storing Vessels	35	32
Oval forms	Wood-Turning	38	29	Bags—			
Ovens—				Closures	do	54	32
Bakers'	Stoves and Furnaces	205	19	Square-bottom	do	119	32
Domestic	do	228	19	Barrels	do	36	32
Overcoming dead-centers	Machine Elements	51	12	Boxes—			
Ox-yokes	Harness	75	11	Curved	do	102	32
Oyster-culture	Fishing and Trapping	9	22	Curved—			
(See Fishing, oyster-				Compartment	do	14	32
culture.)				Pails	do	27	32
Oyster-dredges	do	28	22	Paper-weights	Stationery	28	5
(See Fishing, oyster-				Paraffine	Mineral Oils	55	31
dredges.)				Parallel-rulers	Drafting	86	23
Oyster openers	Kitchen and Table Articles	30	8	Parclement	Paper-Making	25	15
Oyster rakes and tongs	Fishing and Trapping	18	22	Partitions, Sidings and—			
(See Fishing, oyster				Concrete	Fireproof Buildings	23	4
rakes and tongs.)				Tile	do	15	4
Package-carriers	Baggage	32	32	Passenger-cars	Railway Rolling-Stock	76	34
Package-handles	do	30	32	(See Cars, passenger.)			
Packaging braid and	Cordage	13	21	Pastry-boards	Bread, Cracker, and Lozenge	23	15
yarn					Making		
Packing	Tobacco	47	2	Pattern-chains	Weaving	22	21
Packing—				Pattern-exhibitors	Advertising	25	32
Chemicals	Chemicals	67	6	Paving tiles	Clay and Pottery	82	15
Compound and textile	Steam-Engines	165	18	Paving tools	Paving	92	15
Furniture	Furniture	13	8	Pawls and ratchets	Machine Elements	179	12
Paddle-wheels—				Peat-machines	Fuel	143	15
Feathering-blades	Marine Propulsion	191	22	Pedal-bass organs	Music	6	5
Fitting and driving	do	108	22	Pedal piano-actions	do	10	5
Form and construction	do	122	32	Pedals	do	35	5
Padlocks	Locks and Latches	29	20	Pedals—			
Padlocks—				Auxiliary	do	33	5
Alarm	do	3	20	Guards	do	14	5
Divided-shackle	do	9	20	Locks	do	11	5
Indicator	do	11	20	Pedals and cranks	Velocipedes	103	7
Indicator—				Pedestals	Lamps and Gas-Fittings	52	30
Pivoted-shackle	do	37	20	Pedestals	Railway Rolling-Stock	67	34
Permutation	do	42	20	(See Trucks.)			
Permutation—				Peelers and mashers	Vegetable Cutters and Crush-	73	25
Pivoted-shackle	do	41	20		ers		
Sliding-shackle	do	48	20	Peg-floats	Boots and Shoes	78	11
Pin	do	11	20	Pegging-jacks	do	270	11
Pivoted-shackle	do	111	20	Pegging-machines—			
Pivoted-shackle—				Nails and pegs	do	500	11
Sliding-bolt	do	68	20	Wire	do	400	11
Rotating-shackle	do	16	20	Pegs	do	220	11
Seal	do	102	20	Pen and pencil cases	Stationery	155	5
Sliding-shackle	do	73	20	Pencil-cases	do	155	5
Pads	Crinoline and Corsets	63	24	Pencil-clasps	do	95	5
Pails	Packing and Storing Vessels	27	32	Pencils	do	137	5
(See Paper vessels,				Pencil-sharpener	do	294	5
pails.)				Pencil-wood. Making	Woodworking-Machines	11	29
Pails and strainers	Dairy	159	2	Pen-cleaners	Stationery	80	5
Paint-breamers	Stoves and Furnaces	27	19	Pendulum-escapements	Horology	56	23
Painting, decorative	Fine Arts	3	5	Pendulums	do	103	23
Paint-mixers	Painting	39	31	Penholders	Stationery	241	5
Paint-tubes, collapsible	Packing and Storing Vessels	11	32	Penmanship	Educational Appliances	79	31
(See Metallic vessels,				Pen racks and cleaners	Stationery	80	5
paint-tubes, collapsi-				Pens	do	161	5
ble.)				Pens—			
Pan and boiler	Driers	73	28	Fountain	do	333	5
Pan and scraper	do	99	28	Pencils and holders	Sheet-Metal Ware. Making	11	14
Panels and wainscoting	Carpentry	43	29	Stylographic	Stationery	79	5
Panification	Preserving	120	6	Perforated rolls and	Bleaching and Dyeing	58	6
Pans	Driers	24	28	spray-jets			
Pans—				Perforating	Telegraphy	18	16
Ash	Stoves and Furnaces	59	19	Perforating and lace pa-	Paper-Manufactures	154	17
Bake	do	205	19	per			
Frying	do	97	19	Perforators	Printing	23	17
Pantographs	Drafting	30	23	(See Hand-stamps, per-			
Paper-board	Paper-Making	122	15	forators.)			
Paper boxes—				Permutation-locks	Locks and Latches	46	20
Angular	Packing and Storing Vessels	95	32	Permutation-locks—			
Angular—				Dials	do	13	20
Blanks, plural	do	45	32	Hasp	do	16	20
Compartment	do	76	32	Key-hole-guards	do	7	20
Compartment—				Knob-pins	do	8	20
Folded	do	25	32	Operating handle	do	5	20
End folds	do	46	32	Push pin	do	36	20
End laps	do	148	32	Rotating tumblers	do	427	20
Side and end folds	do	18	32	Sliding tumblers	do	17	20
Side and end laps	do	67	32	Spindles	do	23	20
Side folds	do	31	32	Till-Locks	do	60	20
Side folds and end	do	20	32	Personal wear	Metal Personal Wear. Mak-	134	14
laps					ing		
Side laps	do	77	32	Pessaries	Surgery	131	6
Slide	do	55	32	Pharmaceutical	do	58	6
Stays	do	20	32	Photographs	Coin-Controlled Apparatus	21	14
Paper-clips	Stationery	240	5	Phosphates	Fertilizers	100	6
Paper-damping machines	Printing	18	17	Photographic	Coin-Controlled Apparatus	13	14

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Photometers	Optics	16	30	Pipe-wrenches—			
Photosculpture	Photography	3	6	Sliding-jaw	Metal-Working Tools	158	14
Pianissimo devices	Music	49	5	Sliding-jaw—			
Piano-actions	do	303	5	With cutter .....	.....do	30	14
Piano-actions—				Pistol-swords	Firearms	11	22
Dampers	do	16	5	Piston	Fluid-Pressure Regulators	163	31
Flanges	do	20	5	Piston	Steam-Engine Valves	81	18
Frames	do	21	5	Piston-packing, metallic	Steam-Engines	400	18
Hammers	do	20	5	Pistons	Pumps	189	9
Pedal	do	10	5	Pistons	Steam-Engines	26	18
Plectrum	do	7	5	Pitch-boards	Measuring-Instruments	37	23
Pianoagraffes and bridges	do	95	5	Pitchers	Kitchen and Table Articles	223	8
Piano attachments	do	23	5	Pitchers—			
Piano-cases	do	72	5	Tilting-frame .....	.....do	92	8
Piano-frames	do	57	5	Pitchforks	Tools and Implements	24	13
Piano-legs	do	3	5		Making		
Pianos	do	100	5	Pitching casks	Washing Apparatus	29	27
Pianos—				Pitmen	Machine Elements	370	12
Sostenuto	do	27	5	Pitters, corers, and eye-	Vegetable Cutters and Crush-	91	25
Violin	do	15	5	cutters	ers		
Without strings	do	54	5	Pivoted seed-cups	Seeders and Planters	18	1
Piano sounding-boards	do	67	5	Pivoted teeth	Harrow and Diggers	103	1
Piano-stringing	do	37	5	Pivoted tooth-bars .....	.....do	164	1
Piano tuning-pins	do	20	5	Plating	Apparel	129	24
Piano tuning-pins—				Planer attachments	Woodworking-Machines	31	29
Coupling-clamp	do	14	5	Planer-chucks	Metal Turning, Planing, and	31	13
Direct-pull	do	32	5		Milling		
Lever	do	13	5	Planers—			
Presser-deflectors	do	11	5	Beveling	Woodworking-Machines	29	29
Push-rod and carrier	do	9	5	Reciprocating bed or	Metal Turning, Planing, and	155	13
Worm-gear	do	6	5	cutter	Milling		
Picker-checks	Weaving	58	21	Rotary-cylinder	Woodworking-Machines	114	29
Pickers	Carding	256	21	Rotary-disk	do	50	29
Pickers	Weaving	71	21	Rotating bed or cutters	Metal Turning, Planing, and	13	13
Picking and swilling	Coating with Metal	36	3		Milling		
Picks and mattocks	Tools and Implements	37	13	Sliding	Woodworking-Machines	68	29
	Making			Planimeters	Measuring-Instruments	8	23
Picks for zithers	Music	4	5	Planing and matching	Woodworking-Machines	122	29
Picture-frames	Fine Arts	228	5	Planing and sawing	do	32	29
Picture-hangers	Furniture	31	8	Planographic machines	Printing	31	17
Picture-hangers—				Planographic machines—			
Adjustable	do	58	8	Bed and cylinder .....	.....do	25	17
Pictures	Fine Arts	55	5	Rotary .....	.....do	18	17
Pictures	Photography	25	6	Planters—			
Picture-supports	Fine Arts	72	5	Corn	Seeders and Planters	1770	1
Pie crimpers and trim-	Bread, Cracker, and Lozenge	17	15	Cotton .....	.....do	354	1
mers	Making			Foot .....	.....do	8	1
Piers, bridges	Bridges	53	4	Hand .....	.....do	22	1
Pigments	Painting	69	31	Hand—			
Pile-drivers	Hydraulic Engineering	18	4	Oscillating .....	.....do	78	1
Pile-drivers—				Reciprocating .....	.....do	270	1
Jigs	do	10	4	Rotating .....	.....do	30	1
Monkey	do	125	4	Potato .....	.....do	121	1
Piston	do	18	4	Potato—			
Sinking	do	20	4	Walking .....	.....do	37	1
Swinging-hammer	do	11	4	Walking .....	.....do	1167	1
Piles—				Walking			
Metallic	do	31	4	Vibrating hoppers .....	.....do	68	1
Protected	do	41	4	Plant frames and houses	Trees, Plants, and Flowers	26	1
Pill-machines	Caoutchouc and Minor Plas-	103	15	Plant-stands .....	.....do	33	1
	tics			Plant-stands—			
Pillows	Beds	75	8	Revolving .....	.....do	35	1
Pillow-sham holders	do	89	8	Plastering	Artificial Stone, Lime, and	73	15
Pin and needle cases	Apparel	96	34		Cement		
Pinch-bars	Railway Rolling-Stock	17	34	Plastering—			
(See Car-movers.)				Fiber .....	.....do	46	15
Pinking	Apparel	10	24	Implements .....	.....do	103	15
Pins	Toilet	170	24	Retarders .....	.....do	116	15
Pins, Making	Needles and Pins	17	13	Plasters	Medicines	77	6
Pins, Papering	do	43	13	Plastics, minor composi-	Caoutchouc and Minor Plas-	155	15
Pipe-cleaners	Tobacco	7	2	tions	tics		
Pipe-couplings	Railway-Brakes	8	34	Plastic splints	Artificial Limbs	8	20
(See Fluid-pressure				Plate	Printing	7	17
train-pipe couplings.)				Plate	Type-Writing Machines	63	30
Pipe-couplings—				Plate and window	Glass	68	15
Detachable	Water-Distribution	730	9	Plate-holders	Photography	80	6
Detachable and flexible	do	366	9	Plate-holders—			
Permanent	do	187	9	Magazine .....	.....do	46	6
Valved	do	146	9	Plate-lifters	Kitchen and Table Articles	65	8
Pipe-cutters—				Plate-machines—			
Inside	Metal-Working Tools	62	14	Bed and cylinder	Printing	35	17
Outside	do	116	14	Bed and platen .....	.....do	14	17
Pipe-expanders	do	178	14	Rotary .....	.....do	8	17
Pipe-hangers	Stoves and Furnaces	66	19	Traveling-bed	do	15	17
Pipe-organs	Music	35	5	Plates and bars	Metal-Rolling	198	13
Pipes and stems	Tobacco	265	2	Platform adjustments	Harvesters	175	7
Pipes—				Platforms	Stoves and Furnaces	88	19
On reed-organs	Music	18	5	Playing-cards	Games and Toys	57	7
Organ	do	19	5	Pleasure-railways	Railways	72	4
Soap-bubble	Games and Toys	17	7	Pleasure-railways	Music	7	5
Pipe-wrenches—				Pliers	Metal-Working Tools	96	14
Chain	Metal-Working Tools	75	14	Pliers—			
Expanding-jaw	do	27	14	Rod and bolt cutters .....	.....do	100	14
Pivoted-jaw	do	471	14	Smiths' tongs .....	.....do	34	14
Pivoted-jaw—				Plotters	Drafting	81	23
With cutter	do	30	14	Plow-irons	Tools and Implements	104	13
Rigid-jaw and spanner	do	36	14		Making		

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Plows	Plows	907	1	Potash. Soda and	Chemicals	189	6
Plows—				Potato-diggers	Harrows and Diggers	66	1
Ditching	do	157	1	Potato-diggers—			
Mole	do	136	1	Bearing-wheel separa-	do	25	1
Revolving	do	46	1	tors			
Shovel	do	430	1	Endless-carrier	do	63	1
Side-hill	do	315	1	Endless-carrier—			
Steam	do	189	1	Receptacles	do	95	1
Wheel	do	1284	1	Plow and screen	do	164	1
Pluggers	Dentistry	10	20	Plow-clearers	do	34	1
Pluggers—				Plow, vibrating screens	do	114	1
Air	do	38	20	Screen-cylinders	do	20	1
Angle attachments	do	19	20	Sifting-wheels, side-de-	do	52	1
Hand-operated	do	51	20	livery			
Power-operated	do	62	20	Spiral conveyers	do	23	1
Plug-making	Tobacco	119	2	Toothed-drum	do	91	1
Plugs	do	54	2	Potato-planters	Seeders and Planters	121	1
Plumb-hobs	Measuring-Instruments	14	23	Pots and kettles	Stoves and Furnaces	148	19
Plungers	Seeders and Planters	87	1	Pots and tools	Painting	50	31
Pneumatic	Ordnance	68	22	Pot-sleepers	Railways	100	4
Pneumatic organ actions	Music	66	5	Pottery articles	Clay and Pottery	66	15
Pneumatic propellers	Marine Propulsion	50	22	Pottery-kilns	do	37	15
Pneumatic railways	Pneumatics	28	28	Pottery-machines	do	176	15
Pneumatic railways—				Poultry-culture	Care of Live Stock	146	2
Dispatch-carriers	do	11	28	Powder—			
Dispatch-tubes	do	124	28	Blasting	Explosives	114	6
Motor-charging	do	21	28	Gun	do	81	6
Pneumatic self-playing	Music	75	5	Power-hammers	Metal-Forging	151	13
instruments				Practice violins	Music	4	5
Pneumatic signals	Railways	45	4	Precipitating	Coating with Metal	100	3
Pneumatic signals	Signals	88	22	Preparing grain—			
Automatic	Railways	51	4	Processes	Mills	54	25
Pneumatic switches	do	16	4	Steaming and dampen-	do	66	25
Pocket-book fasteners	Packing and Storing Vessels	44	32	ing			
and frames				Preparing seed	Seeders and Planters	9	1
Pocket-book holders	do	104	32	Preserving	Hides, Skins, and Leather	28	31
Pocket-books	do	19	32	Preserving—			
Pocket-lighters	Lamps and Gas-Fittings	101	30	Cold	Preserving	42	6
Pockets	Apparel	81	24	Exclusion of air	do	246	6
Points	Plows	151	1	Press-copying	Printing	14	17
Pokers. Shovels, tongs,	Stoves and Furnaces	117	19	Press-copying—			
and				Damping	do	53	17
Pokes	Care of Live Stock	146	2	Press-dyeing	Bleaching and Dyeing	39	6
Poles and shafts	Carriages and Wagons	272	10	Presser bars and rolls	Woodworking-Machines	122	29
Poles and shafts—				Presser feet and lifters	Sewing-Machines	119	24
Convertible	do	37	10	Presses	Glass	80	15
Pole-tips	do	106	10	Presses—			
Polycycles—				Baling—			
Figure	Velocipedes	78	7	Articles and attach-			
Propulsion—				ments—	Presses	127	2
Axle-couplings	do	16	7	Bale-band tighten-			
Crank and chain	do	89	7	ers			
Crank and gear	do	46	7	Bale-ejectors	do	13	2
Crank and pitman	do	16	7	Bales and bale-cov-	do	59	2
Lever and crank	do	148	7	ers			
Lever and ratchet	do	83	7	Binders	do	35	2
Lever, crank, and	do	51	7	Boxes and frames	do	77	2
gear, or chain				Brakes	do	1	2
Lever, ratchet, and	do	51	7	Condensers	do	3	2
gear, or chain				Discharge-end con-	do	9	2
Miscellaneous	do	74	7	tracting devices			
Rack and pinion	do	19	7	Division - h o c k s	do	10	2
Rowing-machines	do	14	7	and block-insert-			
Spring-frame	do	15	7	ers			
Steering devices	do	33	7	Feeders	do	44	2
Polygonal forms	Wood-Turning	53	29	Indicators	do	4	2
Portable	Roofing	82	29	Movable bale-boxes	do	71	2
Portable	Steam-Engines	130	18	Plungers	do	2	2
Portable	Towers	6	4	Retainers	do	5	2
Portable cross-overs	Railways	13	4	Belt and roller	do	53	2
Portable houses	Carpentry	81	29	Plunger—			
Portable nursery-fences	Furniture	5	8	Cam	do	83	2
Portable signals	Railways	12	4	Crank and pitman	do	64	2
Portable track	do	36	4	Lever	do	93	2
Portfolios	Packing and Storing Vessels	33	32	Rack bar and pinion	do	91	2
Portfolios—				Ratchet and grap-	do	131	2
Roll	do	9	32	ple bar			
Positive-lock	Railway-Brakes	9	34	Rebounding	do	245	2
Postage and revenue	Bookbinding	80	5	Screw	do	395	2
stamps				Thrust-bar	do	59	2
Post-hole diggers, trans-	Harrows and Diggers	53	1	Toggle-joint	do	385	2
planters				Toggle-joint—			
Post-office boxes	Stationery	82	5	Inverted	do	95	2
Posts	Lamps and Gas-Fittings	17	30	Windlass	do	196	2
Posts—				Screw	do	6	2
Bases—				Bundling—			
Metal	Fences	171	1	In lengths	do	81	2
Plastic	do	81	1	In lengths—			
Wood	do	12	1	Shingles	do	24	2
Braces—				Wool	do	43	2
Lateral	do	118	1	Can-filling machines	do	130	2
Longitudinal	do	49	1	Copying—			
Metal	do	286	1	Fluid-pressure	do	6	2
Plastic	do	41	1	Hand-impressing	do	6	2
Wood	do	45	1	Hand-impressing—			
Pot and lid lifters	Stoves and Furnaces	104	19	Book-flexure	do	14	2
				Roller mechanism	do	22	2

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Presses—				Pulleys—			
Expressing—				Lubricating	Journal-Boxes, Pulleys, and	279	12
Articles and attach-				Split.	Shafting.	182	12
ments—				do	Paper-Making	99	15
Boxes and frames ..	Presses	93	2	Pulp-engines and bed-	do	133	15
Cake-formers	do	12	2	plates.	do		
Cake-strippers	do	2	2	Pulp washing and strain-	do		
Cake-trimmers	do	1	2	ing.	Steam-Engines	328	18
Mats	do	88	2	Pumping	do		
Belt	do	34	2	Pumping—	do	103	18
Belt and plunger	do	4	2	Duplex	Pumps.	107	9
Belt and roller	do	53	2	Pumps, miscellaneous	do		
Disk	do	6	2	parts.	Clasps, Buckles, and Buttons	300	11
Plunger—				Punches	Metal Punching and Shear-	60	14
Cam	do	24	2	Punches	ing.		
Crank and pitman	do	2	2	Punching	do	180	14
Lever	do	80	12	Punching-cutters	Woodworking-Machines	159	29
Rack bar and pinion	do	18	12	Punching-machines—	do		
Ratchet and grap-	do	14	12	Crank	Metal Punching and Shear-	24	14
ple bar.				Foot-lever	ing.		
Screw	do	8	2	Hammer	do	16	14
Toggle-joint	do	25	2	Hand-lever	do	20	14
Windlass	do	10	2	do	do	58	14
Roller	do	177	2	Rotary	do	13	14
Screw	do	8	2	Screw	do	33	14
Without operating	do	36	2	Puppet	Steam-Engine Valves.	57	18
mechanism.				Purifiers—			
Packing—				Boxes	Gas.	16	31
Cheese	do	102	2	Compounds	do	20	31
Continuous compres-	do	147	2	Condensers	do	24	31
sion.				Miscellaneous	do	15	31
Silos	do	23	2	Processes	do	15	31
Single-compression	do	149	2	Revivifying	do	9	31
Pressing	Cloth-Finishing	80	21	Trays	do	26	31
Pressing	Metal-Ornamenting	40	14	Washers and scrubbers	do	65	31
Pressure-gages	Measuring-Instruments	100	23	Washers and scrub-			
Pressure-gages—				bers—			
Bonrdon	do	54	23	Float	do	5	31
Diaphragm	do	84	23	Reciprocating	do	4	31
Piston	do	31	23	Rotary	do	30	31
Pressure mechanism.	Saies	16	20	Purifying coal.	Fuel	10	15
Primers	Projectiles.	88	22	Purifying water	Chemicals	75	6
Printing	Telegraphy	87	16	Purses.	Packing and Storing Vessels	41	32
Printing and vignetting	Photography	142	6	Push-bar	Driers	2	28
Printing appliances.	Hardware-Making	76	13	Putting out and stretch-	Hides, Skins, and Leather. .	28	31
Printing couple appli-	Printing	23	17	ing.			
ances—				Putting out and stretch-			
Anti-offset devices	do	29	17	ing.			
Blankets	do	22	17	Stretching-frames	do	35	31
Friskets and fingers	do	15	17	Puzzles and magic	Games and Toys	346	7
Gripters	do	27	17	Pyro-magneto-electric	Electricity. Generation	11	26
Printing—				devices.			
Mechanical	Photography	87	6	Pyrotechnic compounds	Explosives	14	6
Multiple-wheel	Telegraphy	131	16	Pyrotechnic signals.	Signals	73	22
Wheel	do	257	16	Quadruplex	Telegraphy	89	16
Prisms	Optics	1	30	Quicksilver	Metallurgy	42	3
Processes	Artificial Stone, Lime, and	24	15	Quilting	Sewing-Machines	178	24
Processes	Cement.			Quilting-frames	Furniture	147	8
Processes	Brakes and Gins	14	21	Race-courses	Coin-Controlled Apparatus. .	12	14
Processes	Caoutchouc and Minor Plas-	119	15	Racks and pinions	Machine Elements	461	12
Processes	tics.			Racks and rests	Kitchen and Table Articles. .	31	8
Processes	Driers	20	28	Racks and stands	Driers	54	28
Processes	Jewelry	22	5	Radio-phones	Telephony	8	16
Processes	Mineral Oils	9	31	Rafting and booming	Boats	66	22
Processes	Painting	98	31	Rag dusters and engines.	Paper-Making	26	15
Processes	Paper-Making	247	15	Rail	Railway-Brakes	19	34
Processes	Photography	63	6	Rail-braces	Railways	38	4
Processes	Printing	49	17	Rail-gripters	Railway-Brakes	19	34
Processes—				Rail-joints—			
Chemical	Mineral Oils	88	31	Boxes	Railways	5	4
Injecting gases	do	43	31	Bridge-pieces—			
Residuum	do	16	31	Base	do	129	4
Washing and Filtering	do	21	31	Tread	do	157	4
Producers	Gas	67	31	Joint-chairs	do	254	4
Projectiles	Projectiles.	247	22	Miscellaneous	do	28	4
Props. Stays and	Trees, Plants, and Flowers.	14	1	Scarf	do	82	4
Protecting shores	Hydraulic Engineering	25	4	Splice-bars	do	175	4
Protractors	Drafting	72	23	Splice-bars—			
Provision safes	Furniture	42	8	Girder	do	41	4
Provision safes—				Threadless bolts	do	94	4
Knockdown	do	15	8	Trns	do	21	4
Revolving	do	21	8	Web-blocks	do	29	4
Window	do	7	8	Railroad-rails	Metal-Rolling	79	13
Pruning-implements	Cutlery	271	13	Rails	Railways	163	4
Puddlers' balls	Metal-Rolling	30	13	Rails—			
Puddling-hearth	Metallurgy	68	3	Compound	do	160	4
Puddling-hearths—				Rack	do	21	4
Chills and bottoms	do	28	3	Railway	Electric Signaling	133	16
Doors and bits	do	31	3	Railway—			
Png-mills	Clay and Pottery	280	15	Block	do	129	16
Pulleys	Journal-Boxes, Pulleys, and	304	12	Block systems	do	64	16
	Shafting.			Cab	do	48	16
				Cab—			
				Sectional-rail	do	185	16
Pulleys—				Car	Telegraphy	75	16
Expansible	do	59	12	Chairs	Wagon, Car, and Track Irons	41	13
Grip	do	20	12				

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Railway—				Refrigerators	Refrigeration	1032	28
Gates—	Fences	12	1	Regenerators—			
Gates—				Double-surface	Metallurgy	35	3
Automatic mast	do	52	1	Single-surface	do	75	3
Cattle-guards	do	103	1	Registering ballot-boxes	Measuring-Instruments	46	23
Electric	do	17	1	Registers	do	436	23
Mast	do	54	1	Registers—			
		3		Fare	do	243	23
Platform-guards	do	10	1	Game	do	76	23
Pneumatic	do	44	1	Passenger	do	95	23
Rocking	do	52	1	Regular forms—			
Sliding	do	46	1	Lateral-movement	Wood-Turning	78	29
Swinging	do	46	1	Longitudinal-move- ment.	do	57	29
		1		Regulators—			
Vertically-moving	do	52	1	Alternating	Electricity. Generation	27	26
Sectional-rail	Electric Signaling	150	16	Alternating—			
Tank-feeders	Pumps	55	9	Compounding	do	23	26
Track-instruments	Electric Signaling	74	16	Brush-adjustment	do	134	26
Rain-gages	Measuring-Instruments	2	23	Circuit-interruption	do	20	26
Raising sunken vessels	Ships	109	22	Compounding-ma- chines.	do	35	26
Rake and harrow irons	Tools and Implements. Making	62	13	Compound winding	do	64	26
Rakers, band	Harvesters	103	7	Counter electromotive force.	do	22	26
Rakes	Harrows and Diggers	166	1	Engine control	do	36	26
Rakes—				Magnetic reluctance.	do	19	26
Horse	Harvesters	7	7	Reducing sparks.	do	17	26
Rakes and tedders, com- bined.		79	7	Resistance.	do	161	26
Rams	Pumps	52	9	Sectional winding	do	61	26
Ranges	Stoves and Furnaces	262	19	Transmitting mechan- ism.	do	5	26
Razors	Cutlery	92	13	Regulators and spacers	Dentistry	27	20
Reading	Educational Appliances	65	31	Rein-buttons.	Harness	75	11
Reamers	Artesian and Oil Wells	117	25	Rein-holders	do	300	11
Reamers and drifts	Metal Boring and Drilling	111	13	Rein-supports	do	100	11
Reciprocating	Hydraulic Motors	116	9	Relays and repeaters	Telephony	35	16
Reciprocating brakes	Brakes and Gins	110	21	Relays and sounders	Telegraphy	241	16
Reciprocating die-car- riers				Rending	Oils, Fats, and Glue	125	31
Electrical	Matrix-Making	37	30	Renovating dress	Bleaching and Dyeing	15	6
Mechanical	do	11	30	Repairing and capping rails.	Wagon, Car, and Track Irons.	30	13
Reciprocating propellers	Marine Propulsion	88	22	Repeaters	Horology	51	23
Reciprocating tools	Hides, Skins, and Leather	87	31	Repeaters	Telegraphy	48	16
Recorders	Electric Signaling	37	16	Resawing	Wood-Sawing	59	29
Recorders	Measuring-Instruments	104	23	Rests	Metal Turning, Planing, and Milling.	105	13
Recorders—				Rests—			
Fare	do	30	23	Foot	Chairs	98	8
Manual	do	64	23	Hand	Stationery	52	5
Passenger	do	35	23	Head	Chairs	198	8
Pressure	do	44	23	Retort	Driers	40	28
Speed	do	49	23	Retort-chargers	Gas	57	31
Steam-engine-indicators	do	55	23	Retort gas-furnaces	do	32	31
Recording attachments	Music	13	5	Retort-lids	do	68	31
Reducing and separating	Metallurgy	58	3	Retorts and settings	do	36	31
Reducing and separat- ing—				Retorts and settings—			
Aluminium	do	39	3	Attachments	do	31	31
Apparatus	do	5	3	Cleaning	do	21	31
Copper	do	35	3	Domestic plants	do	41	31
Desilverizing lead	do	18	3	Retorts	do	142	31
Desulphurizing ores	do	63	3	Retouching	Photography	28	6
Disintegrating ores	do	27	3	Reversing-valves	Steam-Engine Valves	98	18
Flux	do	32	3	Revolvers	Firearms	624	22
Gold and silver	do	84	3	Revolvers—			
Manganese	do	9	3	Locks	do	18	22
Nickel and cobalt	do	28	3	Revolving-hook machines	Sewing-Machines	141	24
Ore bricks	do	10	3	Revolving hooks	do	68	24
Sodium	do	5	3	Revolving horse-rakes—			
Reed	Telegraphy	57	16	Flop-over.	Harvesters	105	7
Reed-boards	Music	48	5	Wheel	do	134	7
Reed-organ attachments	do	15	5	Reworking	Metal-Rolling	72	13
Reed-organs	do	148	5	Rheostats	Electricity. Conductors	157	26
Reed-organs—				Ribbon-clasps	Clasps, Buckles, and Buttons	75	11
Folding	do	9	5	Ribbon mechanism	Type-Writing Machines	65	30
With pipes	do	18	5	Ribs and stretchers	Umbrellas and Canes	106	24
Reeds	do	63	5	Ridgers	Plows	29	1
Reeds and reed-making	Weaving	18	21	Ridges	Roofing	28	29
Reefing and furling sails	Ships	106	22	Riding-saddles	Harness	300	11
Reels	Cordage	92	21	Rifling	Arms and Projectiles. Mak- ing	14	13
Reels	Harvesters	229	7	Rifling	Firearms	27	22
Reels	Paper-Manufactures	34	17	Rigging	Cloth-Finishing	16	21
Reels—				Ring-frames	Spinning	86	21
Skein	Driers	4	28	Rings	Clasps, Buckles, and Buttons	300	11
Tray-carrier	do	65	28	Rings—			
Winding	do	4	28	Ear	Jewelry	109	5
Reels and spools	Wire-Working	26	14	Finger	do	109	5
Refining fat oils	Oils, Fats, and Glue	105	31	Rings and travelers	Spinning	138	21
Refining salt	Sugar and Salt	28	6	Riveting	Metal-Forging	158	13
Refining sugar	do	102	6	Road-rammers	Paving	29	15
Reflectors—				Roasters—			
Hooded	Lamps and Gas Fittings	8	30	Blasting	Metallurgy	21	3
Miscellaneous	do	21	30	Hearths	do	21	3
Side	do	118	30	Hearths—			
Refracting attachments	do	50	30	Rotary	do	7	3
Refrigerator-buildings	Refrigeration	240	28				
Refrigerator-cars	do	249	28				

*Reissues.

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Roasters—				Rotary—			
Kilns	Metallurgy	56	3	Oscillating-piston engines.	Steam-Engines	72	18
Muffles	do	26	3	Reciprocating-piston engines.	do	91	18
Revolving—				Single-piston Valves.	Pumps	147	9
Cylinders	do	65	3	Wabbling-piston engines.	Steam-Engine Valves	231	18
Retorts	do	25	3	Rotating tools	Steam-Engines	50	18
Shaft and shelf	do	68	3	Roundabouts	Hides, Skins, and Leather	58	31
Stirrers—				Ronting	Games and Toys	141	7
Endless-chain	do	13	3	Ronting-pattern	Woodworking-Machines	51	29
Reciprocating	do	8	3	Rubber	do	65	29
Rotary	do	30	3	Rubber—	Boots and Shoes	265	11
Screw	do	16	3	Hard	Caoutchouc and Minor Plastics.	61	15
Roasting and smelting hearths.	do	45	3	Soft	do	139	15
Rock-drills	Steam-Engines	309	18	Rubber-dam clamps	Dentistry	45	20
Rockets	Projectiles	37	22	Rudders	Ships	125	32
Rocking frames	Hides, Skins, and Leather	53	31	(See Steering mechanism, rudders.)			
Rod-packing	Steam-Engines	450	18	Rufflers and gatherers	Sewing-Machines	287	24
Rods for wire	Metal-Rolling	148	13	Rulers, desk	Stationery	125	5
Roller-bearings	Railway Rolling-Stock	11	34	Ruling-machines	Printing	134	17
(See Trucks, also wheels.)				Ruling-machines—			
Roller-dies	Metal-Drawing	9	13	Rotary	do	13	17
Roller-gins	Brakes and Gins	132	21	Runners and notches	Umbrellas and Canes	169	24
Rollers and harrows	Harrows and Diggers	109	1	Running-gear	Carriages and Wagons	478	10
Roller-skates	Games and Toys	370	7	Running-stitch	Sewing-Machines	19	24
Rollers, land	Harrows and Diggers	47	1	Sabots and wads	Projectiles	68	22
Roller-tools	Sheet-Metal Ware, Making	75	14	Saddle-bags	Baggage	25	32
Roll-bolders	Photography	61	6	Saddles	Velocipedes	235	7
Rolling	Metal-Ornamenting	47	14	Sad-iron holders	Laundry	75	27
Rolling—				Sad-irons	do	390	27
Cross	Metal-Tube Manufacture	9	13	Safe-boltwork	Safes	64	20
Hoppers	Seeders and Planters	195	1	Safe-boltwork—			
Longitudinal	Metal-Tube Manufacture	55	13	Automatic	do	30	20
Miscellaneous	Metal-Rolling	140	13	Safe-filling	do	32	20
Pins	Bread, Cracker, and Lozenge Making	32	15	Safety	Steam-Engine Valves	373	18
Spiral	Metal-Tube Manufacture	41	13	Safety attachments	Clasps, Buckles, and Buttons	150	11
Rolling and embossing	Hides, Skins, and Leather	54	31	Safety-deposit	Safes	4	20
Rolls	Driers	7	28	Safety-deposit boxes	do	7	20
Rolls or webs—				Safety devices	Steam-Boilers	52	18
Continuous-motion, hand.	Painting	14	31	Safety-harness	Accouterments	7	32
Interrupted-motion, hand.	do	5	31	Safety lamps and lanterns	Lamps and Gas-Fittings	27	30
Roofings and coverings, composition.	Composite Roofings and Coverings	274	15	Safety-tube and central-draft—			
Roofs	Roofing	51	29	Draw-bar	do	95	30
Roofs—				Miscellaneous	do	51	30
Fireproof	Fireproof Buildings	22	4	No-raiser	do	293	30
Root-guards	Trees, Plants, and Flowers	3	1	Rack-bar	do	61	30
Rope machines, Cord and	Cordage	242	21	Screw-rod	do	27	30
Rossing bark	Woodworking-Machines	30	29	Swiss screw	do	53	30
Rotary	Hydraulic Motors	431	9	Safety-valves	Water-Distribution	41	9
Rotary	Steam-Boilers	17	18	Safety-wheels	Horology	62	23
Rotary—				Sails and rigging	Ships	90	22
Alternating-piston engines.	Steam-Engines	18	18	Salines	Chemicals	185	6
Brakes—				Salt-ejectors	Dentistry	11	20
Breakers and crushers	Brakes and Gins	46	21	Salt-making	Sugar and Salt	89	6
Rotary brakes	do	135	21	Sampling-tubes	Water-Distribution	22	9
Scutchers	do	23	21	Sand	Pumps	39	9
Concentric-piston engines.	Steam-Engines	712	18	Sand-bands	Carriages and Wagons	120	10
Cylinders	Hides, Skins, and Leather	63	31	Sand-blowers	Pneumatics	8	28
Die-carriers	Matrix-Making	42	30	Sanding devices	Railway Rolling-Stock	5	34
Disk	Driers	2	28	Sanding devices—			
Donkey-piston	Pumps	263	9	Chain-feed	do	5	34
Eccentric-piston engines.	Steam-Engines	160	18	Oscillatory feed	do	28	34
Engines	do	34	18	Reciprocatory feed—			
Feathering	Hydraulic Motors	93	9	Horizontal	do	15	34
Impact-engines	Steam-Engines	152	18	Vertical	do	11	34
Machines	Linotyping	5	30	Rotary feed	do	12	34
Machines	Printing	26	17	Sap-buckets	Trees, Plants, and Flowers	35	1
Machines—				Sap-sponts	do	52	1
Associators	do	31	17	Sarcophagi	Clay and Pottery	26	15
Associators—				Sash-balances—			
Stop-sheet	do	9	17	Drum and cord	Builders' Hardware	69	20
Associators and folders.	do	54	17	Friction	do	13	20
Machines and associators.	do	13	17	Friction-roller	do	7	20
Machines and deliveries.	do	20	17	Gear and rack	do	56	20
Machines and folders	do	12	17	Spring	do	11	20
Machines, associators, and folders.	do	27	17	Weight	do	102	20
Non-perfecting	do	49	17	Sash-cord fasteners	do	88	20
Reversing and perfecting.	do	30	17	Sash-cord fasteners—			
Rotary conical printing coupler.	do	7	17	Weight	do	19	20
Molds	Metal-Founding	27	3	Sash-cord guides	do	115	20
				Sashes and blinds—			
				Making	Woodworking-Machines	5	29
				Tenoning	do	26	29
				Sash-fasteners	Builders' Hardware	333	20
				Sash-fasteners—			
				Gear and rack	do	90	20
				Lifts	do	139	20
				Mid-rail	do	81	20

*Reissues.

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Sash-fasteners—				Scuppers and hawse-holes	Ships	25	22
Right-angle	Builders' Hardware	43	20	Scythes	Tools and Implements.	21	13
Rod-clamps	do	59	20		Making		
Sliding bolts	do	298	20	Scythes and cradles	Harvesters	167	7
Sash-holders	do	210	20	Seal-bolts	Locks and Latches	36	20
Sash-holders—				Sealing-tools	Printing	44	17
Clamps	do	16	20	(See Hand-stamps, seal-			
Combined fasteners	do	128	20	ing-tools.)			
Foot	do	86	20	Seals	Locks and Latches	135	20
Roller-bearing	do	110	20	Seals—			
Strips	do	27	20	Automatic catch	do	35	20
Wedges	do	63	20	Box and bag	do	6	20
Sash-weights	do	32	20	Box-strap	do	11	20
Sausage-machines	Butchering	99	25	Seaming sheets	Sheet-Metal Ware, Making	94	14
Sawbucks	Wood-Sawing	39	29	Seamless	Metal-Tube Manufacture	8	13
Saw clamps and jointers	Tools and Implements.	192	13	Seat-locks	Carriages and Wagons	127	10
	Making			Seats	do	141	10
Saw-gins	Brakes and Gins	248	21	Seats	Harvesters	47	7
Saw-guards	Wood-Sawing	50	29	Seats—			
Saw-guides	do	135	29	Car	Chairs	264	8
Saw-handles	Woodworking-Tools	198	29	Circus	do	7	8
Saw-hanging	Wood-Sawing	123	29	Reversible	do	11	8
Sawing	Metal Punching and Shear-	67	14	Shifting	Carriages and Wagons	298	10
	ing.			Spring	do	166	10
Sawing-machines, recip-	Wood-Sawing	60	29	Spring	Chairs	78	8
rocating saw.				Sectional	Steam-Boilers	522	18
Sawing stone	Stone-Working	223	25	Sectional—			
Sawmill appliances	Wood-Sawing	76	29	Headers	do	254	18
Sawmill-carriages—				Sectional and folding	Boats	78	22
Feed	do	168	29	Sectional conductors—			
Offsetting	do	40	29	Connected	Electricity. Electric Rail-	28	26
Sawmill-dogs	do	161	29		ways.		
Sawmill set-works	do	363	29	Magnetic closers	do	76	26
Saws	Tools and Implements.	86	13	Mechanical closers	do	77	26
	Making			Traveling closers	do	12	26
Saws	Wood-Sawing	271	29	Seeders	Vegetable Cutters and Crush-	90	25
Saw-setting	Tools and Implements.	376	13		ers.		
	Making			Seed, preparing for plant-	Seeders and Planters	9	1
Saws, gumming	do	125	13	ing.			
Saw-sharpening—				Seed-testers	Trees, Plants, and Flowers	3	1
Reciprocating tool	do	255	13	Selectors, interlocking	Railways	23	4
Rotating tool	do	184	13	Self-binders			
Saw-swaging	do	185	13	Clips and prepared	Harvesters	27	7
Saw-table gages	Wood-Sawing	101	29	bands.			
Saw-teeth	do	232	29	Cord-knitters	do	456	7
Scabbard-hangers	Accessories	15	32	General structure	do	484	7
Scabbards	do	13	32	Gleaners and binders	do	33	7
Scaffold-binders	Carpentry	32	29	Tension and take-up de-	do	51	7
Scaffolds	do	187	29	vices.			
Scaffolds—				Twisters and tuckers	do	96	7
Bracket	do	61	29	Wire-twisters	do	192	7
Restle	do	74	29	Self-playing attachments,	Music	44	5
Scaffolding and singeing	Butchering	21	25	keyboard.			
Scales—				Self-playing instruments	do	175	5
Beams	Measuring-Instruments	90	23	Self-playing instru-			
Cart	do	51	23	ments—			
Hydrostatic	do	34	23	Cylinder	do	84	5
Pans	do	15	23	Electropneumatic	do	7	5
Pendulum	do	112	23	Note-sheets	do	17	5
Platform	do	229	23	Pneumatic	do	75	5
Price	do	76	23	Spurs and picks	do	22	5
Sack	do	97	23	Self-rakers—			
Spring	do	160	23	Endless carriers	Harvesters	160	7
Scarificators and lancets	Surgery	47	6	Gaveling-tongs	do	32	7
Scholars' companions	Stationery	42	5	Platform-movement	do	114	7
School desks and seats	Chairs	397	8	Reciprocating—			
Scissors and shears	Cutlery	259	13	Horizontal curvilinear	do	180	7
Scoops	Kitchen and Table Articles	57	8	Horizontal rectilinear	do	92	7
Scows	Ships	86	22	Rotary—			
Screens	Carding	12	21	Horizontal axis	do	80	7
Screens	Furniture	14	8	Vertical axis—			
Screens—				No-switch	do	151	7
Folding	do	25	8	Switch	do	141	7
Screens and riddles	Thrashing	79	25	Traveling—			
Screw-blank feeders	Metal Bolts, Nuts, Rivets,	39	13	Horizontal irregular	do	63	7
	and Screws.			path.			
Screw-cutting machines	do	380	13	Vertical irregular	do	16	7
Screw-drivers	Woodworking-Tools	80	29	path.			
Screw-drivers—				Semaphores	Signals	59	22
Attachments	do	46	29	Separating rope	Cordage	2	21
Ratchet	do	44	29	Separators	Steam-Boilers	118	18
Screw-feed	Seeders and Planters	39	1	Separators, boxes, bill-	Stationery	53	5
				files.			
Screw-propellers—				Serving apparatus	Paper-Manufactures	51	17
Fitting and driving	Marine Propulsion	199	22	Serving apparatus—			
Form and construction	do	269	22	Printing attachment	do	44	17
Steering	do	42	22	Roll-holders	do	37	17
Screws	Metal Bolts, Nuts, Rivets,	147	13	Roll-holders—			
	and Screws.			Cutting attachment	do	201	17
Screw-swaging machines	do	101	13	Feeding attachment	do	27	17
Screw-tapping machines	do	77	13	Settees	Chairs	34	8
Screw-thread bending	Sheet-Metal Ware, Making	57	14	Setters and threaders	Sewing-Machines	69	24
Screw-threading machines	Metal Bolts, Nuts, Rivets,	55	13	Setting and distributing	Printing	235	17
	and Screws.			Setting gems	Jewelry	100	5
Scribers	Drafting	13	23	Sewage and night-soil	Fertilizers	87	6
Scrubbing-machines	Brushing and Scrubbing	39	27	Sewing	Apparel	35	24
Scrubbing-pails	do	7	27				
Sculpture	Fine Arts	9	5				

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Sewing hats	Sewing-Machines	46	24	Shoes—	Farriery	200	14
Sewing looped fabrics	do	49	24	Removable-calk	do	92	14
Sewing-needles. Making	Needles and Pins	16	13	Soft-tread	do	18	14
Sewing on buttons	Sewing-Machines	79	24	Swamp	do	3	14
Sewing rings	do	6	24	Shooting devices	Coin-Controlled Apparatus	3	14
Sewing shoes	do	245	24	Short-thread	Sewing-Machines	31	24
Sextants	Optics	19	30	Short-turning gear	Carriages and Wagons	142	10
Shackles	Locks and Latches	61	20	Shoulder-braces	Crinoline and Corsets	45	24
Shade and curtain bangers	Curtains, Shades, and Screens	73	8	Shovels	Harrows and Diggers	229	1
Shade-brackets	do	78	8	Shovels, tongs, and pokers	Stoves and Furnaces	117	19
Shade-fastenings	do	37	8	Show-cases	Store-Furniture	47	8
Shade-guides	do	48	8	Show-cases—	do	15	8
Shade-hangers, verti- cally-adjustable	do	168	8	Lid-lifters	Builders' Hardware	88	20
Shade-raisers	do	113	8	Shutter-bowers	do	37	20
Shade-rollers	do	48	8	Shutter-fasteners	do	22	20
Shade-rollers—	do	35	8	Shutter-fasteners—	Bars or bolts	82	20
Dropping	do	101	8	Catches—	do	8	20
Friction-brakes	do	102	8	Double	do	30	20
Ratchet and pawl	do	251	8	Gravity	do	31	20
Sprig	do	24	8	Rod	do	10	20
Shade-sticks	do	22	30	Single	do	23	20
Shade-supports—	do	8	30	Sliding	do	48	20
Double-clamp	Lamps and Gas-Fittings	28	30	Wall	do	26	20
Drop	do	28	30	Combined sash	do	35	20
Miscellaneous	do	63	30	Fire	do	14	20
Spider	do	12	30	Hooks	do	158	29
Umbrella	do	4	28	Operators	Carpentry	73	4
Shaft and cylinder	Driers	37	28	Shutters	Iron Structures	4	6
Shaft and shelf	do	10	12	Shutters	Photography	5	6
Shaft-casings	Journal-Boxes, Pulleys, and Shafting	268	12	Shutters—	do	9	6
Shaft-couplings	do	162	12	Curtain	do	54	4
Shaft-hangers	do	7	12	Diaphragm	do	119	6
Shafting	do	40	12	Fireproof	Fireproof Buildings	69	29
Shafting—	do	9	28	Pivoted	Photography	26	6
Flexible	do	142	28	Sliding	Carpentry	33	29
Shafts—	do	6	28	Sliding	Photography	15	20
Inclined	Driers	25	13	Swinging	Carpentry	27	20
Vertical	do	29	28	Shutter-workers	do	16	20
Zigzag	do	100	11	Shutter-workers—	do	33	20
Shafts and pulleys	Metal-Forging	11	3	Combined slat	do	20	21
Shaking	Driers	3	2	Cord or chain	do	20	21
Shanks and machines	Boots and Shoes	63	21	Levers	do	95	21
Shaping	Shaping Fluid Metal	182	14	Rotary shaft	do	206	21
Shaping—	do	103	14	Sliding shaft	Sewing-Machines	149	24
By dies—	do	310	21	Sliding shutter	Weaving	9	21
Bars and plates	do	112	13	Shuttle-boxes	do	305	14
Covering wire	do	36	17	Shuttle-checks	do	167	14
Tubes	do	123	22	Shuttle-guards	Fireproof Buildings	15	4
Tubes—	do	182	22	Shuttle-machines	Firearms	168	22
Compound	do	42	8	Shuttle-motions—	Ordnance	27	22
Curved	do	20	22	Fly	Lamps and Gas-Fittings	26	30
By rolls	do	117	10	Pneumatic	Railways	91	4
Shaping and slotting	Metal Turning, Planing, and Milling	129	29	Positive	do	45	4
Sharpeners, pencil	Stationery	114	29	Shuttles—	do	47	4
Shaving-cups	Toilet	104	29	Cop-cell and cover	do	77	4
Shaving, fixed knife	Woodworking-Machines	26	9	Float-detecting	do	48	4
Shawl-straps	Baggage	66	23	Guides and tensions	do	59	4
Sheep-protectors	Care of Live Stock	420	24	Shuttles	do	10	4
Shearing	Cloth-Finishing	9	22	Shuttles and bobbins	do	6	4
Shears—	do	41	7	Shuttle-threaders	do	8	4
Lever and sliding	Metal Punching and Shear- ing	48	7	Side	Nut and Bolt Locks	33	4
Rotary	do	115	27	Key and ratchet	do	19	4
Shedding	Weaving	700	21	Siding and partitions—	do	95	4
Sheet and hoop iron man- ufacture	Metal-Rolling	38	14	Concrete	Fireproof Buildings	66	4
Sheet-stencil making	Printing	114	29	Tile	do	45	4
Shelf and tray	Driers	113	13	Sights	Firearms	88	22
Shell-fuses	Projectiles	117	10	Sights	Ordnance	27	22
Shells	do	129	29	Signal-lights	Lamps and Gas-Fittings	26	30
Shelving	Store-Furniture	114	29	Signals	Railways	91	4
Shields	Ordnance	117	10	Signals—	do	45	4
Shifting-rails	Carriages and Wagons	129	29	Automatic	do	47	4
Shingle	Wood-Sawing	114	29	Automatic—	do	77	4
Shingle—	do	114	29	Agitated	do	48	4
Horizontal-saw	Carpentry	104	29	Alarm	do	59	4
Shingling-brackets	Pumps	26	9	Block	do	10	4
Ship	Ships	223	32	Crossing	do	6	4
Ship-building	Ships' logs	66	23	Setting apparatus	do	8	4
Ships' logs	Measuring-Instruments	420	24	Stops	do	27	4
Shirts	Apparel	9	22	Tappets	do	33	4
Shoal-alarms	Signals	41	7	Trips	do	19	4
Shock-compressors	Harvesters	48	7	Bar	do	95	4
Shoe-blackening stands	Brushing and Scrubbing	115	27	Danger	do	66	4
Shoe-brushes	do	700	21	Detonating	do	45	4
Shoe-fastenings	Boots and Shoes	38	14	Light	Signals	88	22
Shoeing-stands	Farriery	114	13	Pneumatic	do	51	4
Shoe-nail clinchers	do	116	14	Pneumatic—	do	12	4
Shoe nails and tacks	Nails and Spikes	114	13	Automatic	Railways	73	22
Shoes	Farriery	84	14	Portable	do	89	4
Shoes—	do	133	14	Pyrotechnic	Signals	13	4
Composite	do	16	14	Switch	Railways	25	32
Nailless	do	84	14	Train-order	do	50	32
Ox	do	133	14	Sign-dummies	Advertising	25	32
		16	14	Sign-letters	do	50	32

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Signs	Advertising	40	32	Sliding gates —	Fences	52	1
Signs—				Suspended	do	56	1
Automatic-figure	do	20	32	Vibrating tracks	Fire Escapes and Ladders	8	4
Belt	do	50	32	Sliding-poles	Driers	18	28
Endless-belt	do	55	32	Sliding rack	Woodworking-Machines	132	29
Endless-belt—				Slivering	Masonry	11	4
Motors—				Smoke and air flues	Steam-Boiler Furnaces	189	18
Clock	do	20	32	Smoke and gas returning	Steam-Boilers	50	18
Vehicle	do	18	32	Smoke and gases. Intro-			
Guide-post	do	25	32	ducing	Tobacco	17	2
Hanging	do	20	32	Smoking-tobacco	do	39	2
Illuminated	do	40	32	Smoking-tubes	Clasps, Buckles, and Buttons	600	11
Illuminated—				Soap-books	Stoves and Furnaces	93	19
Lantern	do	36	32	Snow and ice melters	Tobacco	2	2
Perforated	do	32	32	Snuff-manufacture	Oils, Fats, and Glue	35	31
Interchangeable-letter	do	50	32	Soap articles	Games and Toys	17	7
Interchangeable-slide	do	22	32	Soap-bubble pipes	Oils, Fats, and Glue	40	31
Mechanically-rotated	do	53	32	Soap-cutting	do	11	31
Multiple-plate	do	37	32	Soap-frames	Furniture	57	8
Raised letters	do	18	32	Soap-holders	Oils, Fats, and Glue	125	31
Rotatable	do	47	32	Soap-manufacture	do	50	31
Single-plate	do	16	32	Soap-presses	Electric Lighting	267	16
Street-lamp	do	27	32	Sockets and keys	Chemicals	189	6
Vibrating	do	21	32	Soda and potash	Flows	45	1
Silk	Silk	14	21	Sod-cutters	Chairs	55	8
Singeing	Cloth-Finishing	8	21	Soft rubber	Caoutchouc and Minor Plas-	139	15
Single-acting compound	Steam-Engines	103	18		Driers	6	28
Single-chuck lathes	Wood-Turning	87	29	Solar			
Single-cylinder	Steam-Engines	170	18	Soldering—	Sheet-Metal Ware. Making	67	14
Single rail	Railway Rolling-Stock	5	34	Clamps			
Single rail—				Clamps—			
Side guides	do	6	34	Expanding-mandrel	do	42	14
Side guides—				Trough	do	30	14
Locomotives	do	22	34	Fluxes	do	7	14
Single top and bottom rail	do	7	34	Irons	do	70	14
Sinks and traps	Baths and Closets	565	9	Irons—			
Siphons	Water-Distribution	97	9	Heaters	do	73	14
Sizing	Cloth-Finishing	8	21	Heaters—			
Sizing. Waterproofing	Paper-Making	279	15	Electric	do	26	14
and				Machines	do	153	14
Skaters' appliances	Games and Toys	27	7	Machines—			
Skates	do	438	7	Dip	do	74	14
Skate-wheels	do	36	7	Dip—			
Skeleton	Towers	99	4	Endless-chain carrier	do	44	14
Skids	Hoisting	83	12	Electric	do	7	14
Skinning	Butchering	13	25	Reciprocating carrier	do	27	14
Skipping-ropes	Games and Toys	15	7	Rotary-table carrier	do	29	14
Skirt-elevators	Apparel	49	24	Rotary-table carrier	do	70	14
Skirt-machines	Crinoline and Corsets	20	24	Endless-chain carrier	do	46	14
Skirts	Apparel	43	24	Rotary-table carrier	do	33	14
Skyights	Carpentry	157	29	Solders	Boots and Shoes	200	11
Slack-adjusters	Railway-Brakes	33	34	Sole and heel plates	do	360	11
Slack-adjusters—				Sole and heel trimming			
Ratchet-bar	do	26	34	Sole-machines	do	450	11
Ratchet-driven screw	do	12	34	Solenoid	Railway-Brakes	12	34
Slag	Metallurgy	22	3	(See Electric, solenoid-			
Slag—				operated.)	Boots and Shoes	340	11
Disintegrating	do	30	3	Soles	Music	14	5
Heaters	do	19	3	Sole attachments	Metallurgy	75	3
Separators, centrifugal	do	19	3	Solution and precipita-			
Slate and blackboard rub-	Stationery	124	5	tion			
bers				Solution and precipita-			
Slate and shingle	Roofing	76	29	tion—			
Slate-mufflers	Educational Appliances	69	31	Apparatus	do	15	3
Slates	do	157	31	Chlorination	do	70	3
Slaughtering, elevating,	Butchering	77	25	Cyanides	do	19	3
and suspending				Ferric salts	do	12	3
Sled-propellers	Carriages and Wagons	164	10	Parting bullion	do	12	3
Sleds	do	516	10	Sostenuto-pianos	Music	27	5
Sleds—				Soud-deadening devices	Railway Rolling-Stock	6	34
Brakes	do	152	10	Sounding-boards, piano	Music	67	5
Hand	do	85	10	Sounding toys	Games and Toys	138	7
Shifting-thills	do	52	10	Sounding wheeled toys	do	45	7
Wheel-runners	do	142	10	Spacing-instruments	Measuring-Instruments	13	23
Sledways	Railways	16	4	Spark-arresters	Steam-Boiler Furnaces	552	18
Sleeping-cars	Railway Rolling-Stock	271	34	Spark-catchers	Lamps and Gas-Fittings	18	30
(See Cars, sleeping.)				Spark-conductors	Steam-Boiler Furnaces	178	18
Sleigh-bells	Signals	69	22	Speaking-tubes	Steam-Boiler Furnaces	86	22
Slicers				Special lamps	Signals	91	30
Beveling	Woodworking-Machines	253	29	Special machines	Lamps and Gas-Fittings	176	24
Reciprocating	do	251	29	Special machines	Sewing-Machines	4	21
Rotary and oscillating	do	214	29	Special machines	Weaving	173	29
Slide	Steam-Engine Valves	129	18	Special work	Woodworking-Machines	14	23
Sliding and swinging	Fences	43	1	Specific-gravity appara-	Measuring Instruments		
gates		1	1	tus			
Sliding and swinging				Spectacle-cases	Optics	34	30
gates—				Spectacles	do	171	30
Hinged rollers	do	125	1	Speculums	Surgery	66	6
Suspending frames	do	127	1	Speed-governors	Steam-Engines	139	18
Sliding-door fasteners	Locks and Latches	128	20	Speed-governors—			
Sliding-door openers	Fences	15	1	Centrifugal	do	422	18
Sliding gates	do	74	1	Marine	do	41	18
Sliding gates—				Pressure	do	126	18
Lever-openers	do	103	1	Spelter	do	6	3
Pulley or rack openers	do	74	1		Metallurgy		

*Reissue.

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Spelter—				Stairs	Carpentry	71	29
Processes	Motallurgy	31	3	Stakes	Railway Rolling Stock	13	34
Retorts	do	20	3	(See Cars, freight.)			
Stacks	do	10	3	Stakes and targets	Optics	26	30
Sphygmoscopes	Measuring-Instruments	7	23	Stalk-choppers	Harrows and Diggers	14	1
Spikes, Making	Nails and Spikes	142	13	Stalk-choppers—			
Spindle-driving devices	Spinning	76	21	Draw-cut	do	34	1
Spindles and appurte-	do	145	21	Reciprocating	do	30	1
nances.				Revolving—			
Spindles and bearings—				Horizontal	do	151	1
Bolsters	do	77	21	Vertical	do	16	1
Combined bearings	do	253	21	Vine-cutters	do	13	1
Sleeve-whirls and stand-	do	38	21	Stalk-cutters	Harvesters	115	7
ards.				(See Corn-harvesters.)			
Spindles and bearings	do	61	21	Stalk-pullers—			
Steps	do	59	21	Hand	Harrows and Diggers	58	1
Spinners' and weavers'	Hardware-Making	70	13	Wheel	do	28	1
appliances.				Stamping	Hardware-Making	60	13
Spinning	Sheet-Metal Ware, Making	59	14	Stamping	Sheet-Metal Ware, Making	49	14
Spinning-tops	Games and Toys	101	7	Stamps—			
Spiral	Driers	8	28	Hand	Printing	50	17
Spiral tool-drivers	Woodworking-Tools	33	29	Postage and revenue	Bookbinding	80	5
Spiral weld	Metal-Tube Manufacture	20	13	Stanchions	Care of Live Stock	98	2
Spirometers	Measuring-Instruments	3	23	Standards	Carriages and Wagons	112	10
Spittoons	Furniture	118	8	Standards	Plows	46	1
Spittoons—				Staples	Chains, Staples, and Horse-	18	13
Covered	do	46	8		shoes.		
Flushing	do	12	8	Staples—			
Splices and joints	Carpentry	54	29	Making	do	60	13
Splitting	Leather-Working Machin-	110	11	Starch	Sugar and Salt	149	6
	ery.			Starching-machines	Laundry	53	27
Splitting and bundling	Woodworking-Machines	74	29	Starters	Railway Rolling-Stock	274	34
Spokes	Railway Rolling-Stock	—	34	Starters and brakes	do	281	34
(See Wheels.)				Stays	Crinoline and Corsets	283	24
Spoke-shaves	Woodworking-Tools	48	29	Stays and props	Trees, Plants, and Flowers	14	1
Spoke-shaves—				Steading and feeding—			
Adjustable-bit	do	36	29	Calf-feeders	Care of Live Stock	11	2
Spoke-sockets	Carriages and Wagons	125	10	Combined troughs and	do	117	2
Sponge-cups	Stationery	110	5	racks.			
Sponging	Cloth-Finishing	53	21	Feed-racks	do	42	2
Spools	Cordage	26	21	Feed-troughs	do	250	2
Spoons, manufacture of	Hardware-Making	77	13	Nose-bags	do	106	2
Spring-gear	Carriages and Wagons	215	10	Releasing devices	do	75	2
Spring-gears—				Stall-floors	do	48	2
Axle-cross	do	123	10	Stalls, sheds, and pens	do	86	2
Lever	do	104	10	Steam-actuated	Steam-Engine Valves	403	18
Longitudinal	do	530	10	Steam and bleach chests	Bleaching and Dyeing	48	6
Side-bar cross	do	354	10	Steam and vacuum pumps	Steam and Vacuum Pumps	227	18
Springs	Beds	117	8	Steamboat-chimneys	Ships	13	22
Springs	Carriages and Wagons	90	10	Steam-boiler and flue	Mills	222	25
Springs	Hardware-Making	136	13	scrapers.			
Springs	Railway Rolling-Stock	80	34	Steam-boiler cleaners	Steam-Boilers	247	18
Springs—				Steam-hammers	Steam-Engines	146	18
Bolster	Carriages and Wagons	135	10	Steaming-tables	Stoves and Furnaces	22	19
Braces and equalizers	do	122	10	Steam-joint packing	Steam-Engines	54	18
Coil	Railway Rolling-Stock	39	34	Steam-mufflers	do	92	18
Coil and rubber	do	38	34	Steam-organs	Music	4	5
Coil, cap and bed plates	do	102	34	Steam-plows	Plows	189	1
Conical volute	do	29	34	Steam-radiator attach-	Stoves and Furnaces	120	19
Elliptic	Carriages and Wagons	172	10	ments.			
Elliptic	Railway Rolling-Stock	24	34	Steam-radiators	do	433	19
Elliptic—				Steam sanding	Steam-Engines	50	18
Cap and bed plates	do	20	34	Steam steering	do	87	18
Multiple-disk	do	29	34	Steam-traps	do	248	18
Pneumatic	do	35	34	Steelyards	Measuring-Instruments	21	23
Platform	Carriages and Wagons	138	10	Steering and propulsion	Electricity, Motive-Power	26	26
Rubber	Railway Rolling-Stock	10	34	Steering-heads and han-	Velocipedes	164	7
Rubber—				dle bars.			
Cap and bed plates	do	30	34	Steering mechanism	Ships	238	22
Shackles	Carriages and Wagons	64	10	Steering mechanism—			
Torsion	do	161	10	Hydraulic	do	24	22
Zigzag	Railway Rolling-Stock	13	34	Pneumatic	do	2	22
Spurs and picks for self-	Music	22	5	Rudders	do	125	22
playing instruments.				Wheels in channels	do	8	22
Spurs and stirrups	Harness	200	11	Steering-propellers, (ex-	Marine Propulsion	18	22
Squares	Measuring-Instruments	125	23	cept screw.)			
Squares—				Stem-winders	Horology	273	23
Center	do	21	23	Stenciling-machines	Printing	61	17
Folding	do	47	23	Stencil-making pens	do	37	17
Stackers	Hoisting	162	12	Stencil-plates	do	67	17
Staffs	Railway-Brakes	8	34	Step-ladders	Fire Escapes and Ladders	385	4
Staffs—				Step-ladders—			
Friction-clutch handles	do	6	34	Store-service	do	26	4
Geared	do	13	34	Steps	Carriages and Wagons	86	10
Locking-ratchets	do	41	34	Steps	Railway Rolling-Stock	11	34
Ratchet-handles	do	26	34	(See Cars.)			
Ratchet-handles—				Steps and foot-rests	Velocipedes	15	7
Pivoted	do	10	34	Stereoscopes	Optics	116	30
Screw	do	14	34	Stereotyping	Printing	36	17
Winding attachments	do	7	34	Stereotyping—			
Stair-covers	Carpentry	26	29	Casting-boxes	do	57	17
Stair-curves	Drafting	17	23	Matrices and materials	do	41	17
Stair-rods and securers	Builders, Hardware	64	20	Sterilizers, liquid	Stoves and Furnaces	15	19
Stair-rods and securers—				Stenographic	Type-Writing Machines	15	30
Buttons	do	8	20	Stills	Mineral Oils	28	31
Fasteners	do	13	20	Stills—			
Rods	do	14	20	Bottoms	do	17	31

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Still—				Stoves—			
Condensers	Mineral Oils	58	31	Cooking—			
Feeders	do	7	31	30 ^b Steam	Stoves and Furnaces	27	19
Films	do	17	31	Gas	do	587	19
Furnaces and flues	do	32	31	Heating	do	397	19
Heads	do	13	31	Heating—			
Jackets	do	22	31	Central air-tube	do	23	19
Rotary	do	7	31	Horizontal body	do	41	19
Series	do	25	31	Hot-air	do	270	19
Stirrers and scrapers	do	17	31	Open-front	do	68	19
Supplementary heating	do	11	31	Panel	do	15	19
Tubular	do	14	31	Parlor	do	27	19
Utilizing gases and residue	do	1	31	Lamp	do	622	19
Vacuum	do	13	31	Magazine	do	438	19
Vapor-outlets	do	9	31	Magazine—			
Stilts	Games and Toys	38	7	Fireplace	do	74	19
Stippling	Metal-Ornamenting	11	14	Vapor	do	561	19
Stirrers	Driers	18	28	Stove-shelves	do	155	19
Stock-cars	Care of Live Stock	447	2	Straight—			
Stock-grinders	Paper-Making	95	15	Cams and stops	Knitting and Netting	16	21
Stockings	Apparel	43	24	Fashioning-machines	do	73	21
Stocks	Firearms	100	22	Looper pin and hook machines	do	17	21
Stock-sorters	Care of Live Stock	5	2	Straight machines	do	163	21
Stone	Paving	84	15	Warp-machines	do	40	21
Stone and brick settings	Masonry	30	4	Straight weld	Metal-Tube Manufacture	151	13
Stone-gatherers	Harrows and Diggers	21	2	Straightening	Metal-Bending	85	14
Stools and seats	Chairs	215	8	Straightening plates and sheets	do	11	14
Stools and seats—				Straightening plates and sheets			
Duplex	do	13	8	Straw	Sewing-Machines	68	24
Pawl and ratchet	do	52	8	Strawberry-growing	Trees, Plants, and Flowers	9	1
Pedestals	do	38	8	Straw-carriers—			
Screw	do	40	8	Endless aprons	Thrashing	163	25
Stools—				Overhung rakes	do	43	25
Cane	do	60	8	Reels	do	24	25
Folding	do	82	8	Shaking tables	do	140	25
Stop-actions—				Stackers	do	6	25
Organ	Music	76	5	Vibrators	do	50	25
Organ—				Walking-rakes	do	65	25
Combination	do	23	5	Straw-cutters—			
Stop-cocks	Railway-Brakes	8	34	Cutter and bed—			
(See Fluid-pressure train-pipe stop-cocks.)				Reciprocating-knife	Vegetable Cutters and Crushers	4	25
Stopper-extractors	Kitchen and Table Articles	37	8	Rotary-cylinder	do	25	25
Stopper-extractors—				Cylinder and concave	do	22	25
Hook	do	40	8	Double-cylinder	do	21	25
Screw	do	75	8	Pivoted-knife—			
Screw—				Rake-feed	do	13	25
Lever-operated	do	25	8	Roller-feed	do	44	25
Rotary	do	31	8	Without feed	do	111	25
Screw and lever	do	27	8	Rotary-wheel—			
Stopper-fasteners	Packing and Storing Vessels	62	32	Follower-feed	do	6	25
(See Glass and pottery, stopper-fasteners.)				Rake-feed	do	8	25
Stopper-pullers	do	26	32	Roller-feed	do	143	25
(See Glass and pottery, stopper-pullers.)				Without feed	do	13	25
Stoppers	do	105	32	Single-cylinder—			
(See Glass and pottery, stoppers.)				Rake-feed	do	9	25
Stopping	Carding	18	21	Roller-feed	do	123	25
Stopping	Knitting and Netting	98	21	Without feed	do	15	25
Stopping	Spinning	64	21	Sliding-knife—			
Stopping				Rake-feed	do	32	25
Protector mechanism	Weaving	30	21	Roller-feed	do	61	25
Stopping	do	47	21	Without feed	do	77	2
Warp-stop motions	do	23	21	Street-car poles	Railway Draft Appliances	14	34
Warp-stop motions	do	99	21	Street-cars	Railway Rolling-Stock	52	34
Store-service—				(See Cars.)			
Buffers	Store-Service	14	12	Street-lamps	Lamps and Gas-Fittings	157	30
Carriers	do	17	12	Street-light hangers	do	89	30
Carriers—				Street-sweepers	Brushing and Scrubbing	223	27
Wheeled	do	64	12	Stretchers and formers	Apparel	303	24
Gravity	do	175	12	Stretchers, canvas	Fine Arts	40	5
Propulsion	do	192	12	Stretching	Cloth-Finishing	75	21
Propulsion—				Stretching	Silk	9	21
Cable	do	57	12	Stretching and drying	Cloth-Finishing	34	21
Spreaders	do	49	12	Stringers and ties	Railways	66	4
Switches	do	65	12	Stringers and ties—			
Stove doors and windows	Stoves and Furnaces	274	19	Metallic	do	488	4
Stove-hoods	do	89	19	Stringing, piano	Music	37	5
Stove-legs	do	129	19	Strings, auxiliary	do	13	5
Stove lids and tops	do	156	19	Stripping mechanism	Carding	83	21
Stovepipes	do	224	19	Structural work	Metal-Forging	46	13
Stovepipe-shelves	do	148	19	Studios	Photography	6	6
Stovepipe-thimbles	do	279	19	Studios—			
Stove-polishes	Painting	43	31	Accessories	do	39	6
Stoves—				Stump-extractors	Hoisting	28	12
Car	Stoves and Furnaces	53	19	Stump-extractors—			
Car—				Drum	do	61	12
Protective casings	do	35	19	Lever	do	213	12
Cooking	do	793	19	Lever and drum	do	183	12
Cooking—				Screw	do	45	12
Hearth	do	39	19	Stylographic pens	Stationery	49	5
Magazine	do	83	19	Submarine and torpedo	Ships	118	22
Reservoir	do	320	19	Submarine guns	Ordnance	15	22
				Subsoilers	Plows	131	1
				Subways	Masonry	19	4

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Sucker-rod joints	Hardware-Making	41	13	Systems—			
Sucker-rods	Artesian and Oil Wells	85	25	Display	Electric Lighting	28	16
Sugar and salt crushers	Mills	65	25	Distribution	Electricity. Electric Rail-ways.	42	26
Sugar-making	Sugar and Salt	58	6	Divided central	Telephony	52	16
Suit	Oils, Fats, and Glues	10	31	Hand-regulation	Electric Lighting	72	16
Sulkies	Carriages and Wagons	948	10	House	Telephony	20	16
Sun-dials	Horology	42	23	Intermediate sub-sta- tion.	do	81	16
Superheaters	Steam-Boilers	124	18	Multiple switchboard	do	25	16
Supplemental bosoms	Apparel	76	24	Multiple switchboard— Divided central.	do	16	16
Supports	Telephony	90	16	Test	do	189	16
Supports—				Overhead	Electricity. Electric Rail-ways.	139	26
For violins	Music	12	5	Overhead—			
Picture	Fine Arts	72	5	Trolleys	do	312	26
Surfaces	Photography	29	6	Safety	Electric Lighting	39	16
Surfaces	Printing	116	17	Secondary batteries	do	22	16
Surfaces—				Test	do	30	16
Basees	do	25	17	Systems of distribution	Electricity. Generation	152	26
Holders	do	75	17	Tables	Furniture	77	8
Holders—				Tables—			
Sliding-clamp	do	51	17	Adjustable angularly	do	19	8
Planographic	do	61	17	Adjustable angularly and vertically	do	44	8
Planographic—				Adjustable folding	do	25	8
Hektographs	do	38	17	Adjustable vertically	do	25	8
Holders and supports	do	29	17	Attachments	do	27	8
Rules	do	17	17	Extension	do	26	8
Sensitive	Photography	25	6	Extension—			
Types	Printing	65	17	Center	do	51	8
Surge-relievers	Ships	29	22	End	do	51	8
Surveying-instruments	Optics	93	30	Flexible-top	do	31	8
Suspended	Railway Rolling-Stock	9	34	Slides	do	97	8
Suspenders	Clasps, Buckles, and Buttons	800	11	Folding	do	150	8
Suspension-bridges	Bridges	62	4	Folding—			
Swells—				Sectional-top	do	105	8
Knee	Music	7	5	Kitchen	do	37	8
Organ	do	30	5	Lap	do	23	8
Swimming appliances	Boats	44	22	Leaf-supports	do	147	8
Swing-bridges	Bridges	49	4	Leg fastening and brac- ing.	do	105	8
Swinging-door openers	Fences	35	1	Pedestals	do	43	8
Swinging gates	do	88	1	Self-waiting	do	67	8
Swinging gates—				Sewing-machine	do	77	8
Folding-panel	do	139	1	Sewing-machine—			
Hand-openers	do	422	1	Covers	do	71	8
Load-openers	do	177	1	Surgical	do	57	8
Rotary	do	30	1	Wail	do	50	8
Self-closers	do	60	1	Tables and frames	Hides, Skins, and Leather	21	31
Tilting	do	61	1	Tables and racks	Dairy	18	2
Vertically-adjustable	do	142	1	Table-tongs	Kitchen and Table Articles	36	8
Swings	Chairs	199	8	Tablets—			
Switchboards	Telephony	125	16	Writing	Bookbinding	96	5
Switch-chairs	Railways	30	4	Writing—			
Switches	do	114	4	Manifolding	do	69	5
Switches	Telephony	119	16	Tags and tag-fasteners	Clasps, Buckles, and Buttons	450	11
Switches—				Tailoring	Apparel	250	24
Automatic	Railways	221	4	Tailpieces, violin	Music	84	5
Automatic—				Take-ups	Sewing-Machines	119	24
Safety	do	123	4	Take-ups and let-offs—			
Derailing	do	12	4	Beams	Weaving	25	21
Lap	do	21	4	Escapement let-offs	do	25	21
Pneumatic	do	16	4	Friction let-offs	do	98	21
Safety	do	60	4	Let-offs	do	100	21
Slip	do	7	4	Take-ups	do	85	21
Spring	do	61	4	Take-ups and let-offs	do	31	21
Sub	do	61	4	Take-ups and tensions	Knitting and Netting	45	21
Tramway	do	120	4	Tank-feeders, railway	Pumps	55	9
Tramway—				Tanks	Water-Distribution	221	9
Car devices	do	52	4	Tanners' tools	Hides, Skins, and Leather	37	31
Track devices	do	145	4	Tanning apparatus	do	91	31
Switch-pieces	do	49	4	Tanning processes	do	75	31
Switch-rods	do	45	4	Taper	Metal-Rolling	29	13
Switch-signals	do	89	4	Tapping mains	Metal Boring and Drilling	72	13
Switch-stands	do	298	4	Taps and dies	Metal Bolts, Nuts, Rivets, and Screws.	327	13
Synthesis	Electro-Chemistry	4	3	Targets	Firearms	56	22
Synthesis, ozone	do	19	3	Targets—			
Syringes	Surgery	302	6	Flying	do	70	22
Syringes—				Tassels	Cordage	8	21
Expanding-arm	do	18	6	Tattooing	Knitting and Netting	14	21
Pile	do	13	6	Tawing processes	Hides, Skins, and Leather	69	31
Water-bag	do	27	6	Tea-kettles	Stoves and Furnaces	131	19
Systems	Electric Lighting	125	16	Teeders	Harvesters	162	7
Systems	Sewerage	14	9	Teeth	Dentistry	100	20
Systems	Telephony	76	16	Teeth—			
Systems—				Filling	do	13	20
Automatic	do	46	16	Metal crown	do	24	20
Automatic regulation	Electric Lighting	89	16	Porcelain crown	do	56	20
Battery	Electricity. Electric Rail-ways.	65	26	Telegraph-poles	Towers	124	4
Car	Electric Lighting	54	16	Telemetry	Measuring-Instruments	17	23
Central	Telephony	133	16	Telephones	Coin-Controlled Apparatus	47	14
Circuits. Series	Electricity. Electric Rail-ways.	40	26	Telephones—			
Closed-conduit	do	29	26	Electric	Telephony	246	16
Conduit	do	288	26				
Converter	do	38	26				

*Reissues.

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Telephones—				Time-alarms	Horology	151	23
Electric—				Time-checks	do	227	23
Granular	Telephony	83	16	Time lamp-lighters	do	99	23
Multiple-electrode	do	162	16	Time-signals	do	115	23
Magnetic	do	271	16	Tinning	Coating with Metal	122	3
Telescopes	Optics	25	30	Tip-cups	Umbrellas and Canes	46	24
Telfer and towing	Electricity. Electric Rail- ways	48	26	Tip-stiffeners	Boots and Shoes	200	11
Tempering and anneal- ing—				Tire-setters	Wheelwright-Machines	54	29
Applications of elec- tricity	Annealing and Tempering	15	3	Tires	Railway Rolling-Stock	2	34
Metals other than iron	do	9	3	(See Wheels.)			
Temples	Weaving	183	21	Tires—			
Temporary binders	Bookbinding	589	5	Cushion	Carriages and Wagons	181	10
Tenoning and boring	Woodworking-Machines	107	29	Inflating	do	14	10
Tenoning-bits	do	90	29	Metallic	do	61	10
Tensions	Sewing-Machines	224	24	Pneumatic	do	309	10
Tents	Acconferments	17	32	Repairing	do	13	10
Tents—				Tire-tighteners	do	219	10
Bed	do	10	32	Tire-upsetting	Wagon, Car, and Track Irons	295	13
Frames	do	61	32	Tobacco—			
Pegs and poles	do	12	32	Cutters—			
Pipe shields and venti- lators	do	19	32	Pivoted-knife	Tobacco	35	2
Shelter	do	10	32	Reciprocating-knife	do	55	2
Testers	Coin-Controlled Apparatus	35	14	Rotating-knife	do	67	2
Lung	do	12	14	Hangers	do	88	2
Strike	do	16	14	Leaf-treating	do	20	2
Testing	Electricity. Special Appli- cations	7	16	Leaf-treating—			
Testing illuminating- fluids	Measuring-Instruments	22	23	Booking	do	8	2
Testing-instruments	Optics	18	30	Stem-crushing	do	10	2
Testing-machines	Measuring-Instruments	197	23	Stemming	do	29	2
Tethers	Care of Live Stock	83	2	Substitutes	Medicines	26	6
Thatch	Roofing	7	29	Tobacco-users' appli- cances	Tobacco	17	2
Theater appliances	Fine Arts	141	5	Toe-weights	Farriery	114	14
Thermocauters	Surgery	13	6	Toilet-cases	Toilet	69	24
Thermometers	Measuring-Instruments	82	23	Toilet-kits	Baggage	18	32
Thermometers—				Toilet-tollers	Measuring-Instruments	30	23
Metallic	do	52	23	Tompions and valves	Ordnance	6	22
Oven	do	18	23	Tongs, pokers, and shov- els	Stoves and Furnaces	117	19
Pyrometers	do	31	23	Tongue-supports	Carriages and Wagons	190	10
Thermometers	do	32	23	Tool-handle fastenings	Woodworking-Tools	145	29
Thill-couplings	Carriages and Wagons	1083	10	Tool-handles	do	121	29
Thill-couplings—				Tool-handles—			
Antirattlers	do	261	10	Sockets	do	147	29
Jacks	do	73	10	Tools	Boots and Shoes	80	11
Thill-supports	do	181	10	Tools	Dentistry	75	20
Thimbles	Apparel	43	24	Tools	Glass	239	15
Thimbles—				Tools	Paving	92	15
Manufacture of	Metal Personal Wear. Mak- ing	7	14	Tools	Railway Draft Appliances	34	
Thrashers	Harvesters	76	7	Tools			
Thrashing-machines—				Burrs	Sheet-Metal Ware. Making	56	14
Cylinder-machines	Thrashing	430	25	Engraving	Stone-Working	132	25
Dust-conveyers	do	43	25	Forceps	Wire-Working	21	14
Flail-machines	do	23	25	Tools and implements	Woodworking-Tools	56	29
Vine and seed strippers	do	115	25				
Thread	Nut and Bolt Locks	145	14	Making	Toilet	29	24
Thread—				Toilet	Nut and Bolt Locks	127	14
Cutters	Sewing-Machines	40	24	Topical remedies	Medicines	421	6
Finishing yarn and	Cordage	132	21	Top joints	Carriages and Wagons	105	10
Holders and cutters	Apparel	99	24	Top, key and ratchet	Nut and Bolt Locks	115	14
Key and ratchet	Nut and Bolt Locks	196	14	Top-props	Carriages and Wagons	141	10
Thresholds	Carpentry	51	29	Top-roll saddles	Spinning	33	21
Throttle	Steam-Engine Valves	91	18	Tops	Carriages and Wagons	453	10
Throttle—				Top shoes	Railway-Brakes	21	34
Electric	do	17	18	Torches	Lamps and Gas-Fittings	59	30
Throttles and caps	Spinning	161	21	Torpedoes	Projectiles	69	22
Throwing	Silk	23	21	Touch-regulators, keys and keyboards	Music	10	5
Ticket-cases	Stationery	140	5	Towel racks and stands	Furniture	33	8
Ticket-clasps	Clasps, Buckles, and Buttons	100	11	Towers—			
Ticket-machines	Printing	25	17	Fixed	Fire Escapes and Ladders	29	4
Tickets	Bookbinding	138	5	Shooting	do	57	4
Tide-powers	Hydraulic Engineering	76	4	Towing—			
Tie-bands	Metal Punching and Shear- ing	24	14	External power	Marine Propulsion	31	22
Tile	Roofing	97	29	Internal power	do	86	22
Tile and metal floors	Masonry	6	4	Toy building-blocks	Games and Toys	53	7
Tile cutters. Brick and	Clay and Pottery	115	15	Toy money-boxes	do	128	7
Tile-machines	do	168	15	Toy pistols	Firearms	143	22
Tile-machines—				Toys	Games and Toys	147	7
Continuous	do	135	15	Trace-carriers	Harness	200	11
Dies	do	48	15	Track—			
Socket-formers	do	36	15	Cleaners—			
Tampers	do	36	15	Blade and broom	Railways	83	4
Till-alarms	Builders' Hardware	20	20	Centrifugal	do	133	4
Tilting gates	Fences	92	1	Dumpers	do	38	4
Tilting gates—				Elevators	do	34	4
Folding-panel	do	62	1	Explosive	do	7	4
Timbers. Columns and	Fireproof Buildings	13	4	Flangers	do	103	4
Timber-seats	Masonry	35	4	Flangers—			
				Rotary	do	9	4
				Vibrating	do	5	4

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Track—				Traveling-bags—			
Cleaners—				Hinge-stays	Baggage	20	32
Hot plows	Railways	11	4	Telescoping	do	23	32
Oilers and washers	do	18	4	Traveling-bed machines	Printing	23	17
Plows	do	163	4	Traveling-flat cards	Carding	37	21
Removing weeds	do	5	4	Trays	Kitchen and Table Articles	82	8
Snow-guards	do	8	4	Trays—			
Stock-alarms	do	15	4	Attaching devices	do	12	8
Clearers and dividers	Harvesters	81	7	Trays and tanks	Photography	77	6
Curves	Railways	25	4	Treadles	Machine Elements	485	12
Fastenings	do	125	4	Treadles—			
Irons, miscellaneous	Wagon, Car, and Track Irons	62	13	Hand attachments	do	30	12
Layers	Railways	85	4	Treating molten iron	Metalurgy	50	3
Miscellaneous	do	76	4	Treating molten iron—			
Platforms	do	5	4	Air, steam, and gases	do	103	3
Raisers	do	83	4	Alloys	do	73	3
Traction	do	70	4	Basic	do	47	3
Traction—				Basic linings	do	41	3
Cable-shields	do	6	4	Granulating	do	14	3
Crossing conduits	do	43	4	Oxides	do	85	3
Crossing streams	do	11	4	Physic	do	87	3
Curves	do	70	4	Scrap	do	31	3
Engines	Carriages and Wagons	354	10	Vacuum	do	5	3
Increasers	Railway Rolling-Stock	29	34	Treatment	Trees, Plants, and Flowers	18	1
(See Locomotives.)				Treatment—			
Running and carrying	Railways	36	4	Implements	do	30	1
rope				Tree-covering	do	13	1
Slot-closers	do	17	4	Trellises	do	57	1
Slot-switches	do	27	4	Tremolos	Music	58	5
Take-ops	do	17	4	Trimmers	Sewing-Machines	170	24
Underground	do	234	4	Trimnings	Apparel	163	34
Wheels	Carriages and Wagons	217	10	Trimnings	Harness	200	11
Train-operated	Railway-Brakes	18	34	Tripods	Optics	54	30
Train-operated—				Trolley-operated track-	Electricity. Electric Rail-	8	26
Rotary shafts	do	47	34	switches	ways		
Winding	do	109	34	Trolleys	do	312	26
Train-order signals	Railways	13	4	Trough and heater	Driers	103	28
Trains, power-transmit-	Railway Rolling-Stock	8	34	Trough and screw	do	23	28
ters				Troughs and moldings	Sheet-Metal Ware. Making	105	14
Tramway-switches	Railways	120	4	Truck and rail—			
Transfers	Fine Arts	44	5	Horizontal	Driers	85	28
Transfer-tables	Railways	27	4	Inclined	do	22	28
Transformers—				Truck-changers	Railways	25	4
Rotary	Electricity. Generation	28	26	Trucks	Carriages and Wagons	256	10
Stationary	do	109	26	Trucks	Railway Rolling-Stock	182	34
Transmission of power—				Trucks—			
Alternating	Electricity. Motive-Power	17	26	Antifriction-wheels	do	19	34
Alternating—				Barrel	Carriages and Wagons	40	10
Phase-modifiers	do	14	26	Bolsters	Railway Rolling-Stock	28	34
Direct	do	45	26	Bolsters—			
Reciprocating	do	47	26	Cast	do	7	34
Transmitters	Telegraphy	69	16	Guides	do	6	34
Transom-lifters	Builders' Hardware	170	20	Pressed-steel	do	5	34
Transom-lifters—				Trussed	do	18	34
Pivots	do	44	20	Brick	Carriages and Wagons	31	10
Transplanters	Harrows and Diggers	14	1	Cable-grip	Railway Rolling-Stock	16	34
Transplanters—				Center bearings	do	21	34
Dibbles	do	13	1	Center bearings—			
Pivoted jaws	do	74	1	Pressed-steel	do	11	34
Post-hole diggers	do	53	1	Roller	do	5	34
Post-hole diggers—				Changeable-gage	do	49	34
Pivoted jaws	do	6	1	Curve-adjusters, swiv-	do	8	34
Sliding jaws	do	7	1	eled wheel			
Wheel-machines	do	61	1	Drying	Carriages and Wagons	14	10
Transplanting-pots	Trees, Plants, and Flowers	35	1	Electric-motor—			
Transposers	Music	42	5	Bogies	Railway Rolling-Stock	10	34
Transposition and har-	do	38	5	Equalizing-levers	do	16	34
mony charts				Motor-supporters	do	31	34
Transposition-charts	do	38	5	Rigid-frame	do	54	34
Trap-belts	Trees, Plants, and Flowers	68	1	Elevating	Carriages and Wagons	70	10
Traps—				Four-wheel—			
Bedbug	Fishing and Trapping	8	22	Bogies	Railway Rolling-Stock	102	34
Cage	do	118	22	Curve-adjusters—			
Expansion	Steam-Engines	123	18	Axles—			
Fish	Fishing and Trapping	105	22	Radial	do	26	34
Impalement	do	156	22	Sectional	do	17	34
Insect	do	299	22	Frames	do	11	34
Jaw	do	222	22	Frames—			
Self-set and ever-set	do	365	22	Pressed-steel	do	12	34
Sporting	do	17	22	House-moving	Carriages and Wagons	36	10
Victim-set	do	98	22	Implement	do	32	10
Wire-choker	do	42	22	Pedestals	Railway Rolling-Stock	67	34
Travelers	Ships	14	22	Piano	Carriages and Wagons	34	10
Traveling-bags	Baggage	60	32	Safety-supporters	Railway Rolling-Stock	14	34
Traveling-bags—				Side bearings	do	15	34
Convertible	do	10	32	Side bearings—			
Fasteners	do	49	32	Roller	do	17	34
Fasteners	do			Six-wheel			
Pivoted	do	30	32	Bogies	do	13	34
Frameless	do	19	32	Curve-adjusters, axles, radial	do	38	34
Frames	do	20	32	Supplemental	do	8	34
Frames—				Water-barrel	Carriages and Wagons	25	10
Top-opening	do	19	32	Trumpets. Cornets and	Music	73	5
Handle-fasteners	do	33	32	Trundles and hoops	Games and Toys	9	7
Handles	do	21	32	Trunk-fasteners	Locks and Latches	91	20

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Trunk-guards—				Umbrella-irons	Hardware-Making	37	13
Cattle	Trees, Plants, and Flowers	36	1	Umbrellas—			
Vermis	do	26	1	Folding	Umbrellas and Canes	76	24
Trunks	Baggage	132	32	Self opening and closing	do	25	24
Trunks—				Supporters	do	176	24
Bureau	do	38	32	Umbrella-stands	Furniture	64	8
Convertible	do	9	32	Underground	Electricity. Conductors	476	26
Convertible—				Underwaists	Crimoline and Corsets	42	24
Bed	do	25	32	Unicycles	Velocipedes	34	7
Corner-shields	do	41	32	Universal joiners	Woodworking-Machines	51	29
Cylindrical	do	16	32	Universal joints	Machine Elements	153	12
Desk and table	do	15	32	Upholstery	Chairs	42	8
Extensible	do	12	32	Upper-machines	Boots and Shoes	450	11
Followers	do	20	32	Uppers	do	660	11
Handles	do	13	32	Upsetting metal	Metal-Forging	18	13
Hinge-stays	do	20	32	Urinals	Baths and Closets	67	9
Lid-stays	do	58	32	Urinary apparatus	Surgery	8	0
Straps and strap-fas- teners.	do	44	32	Utilizing tin-scrap	Metallurgy	25	3
Supporting devices	do	12	32	Utilizing tin-scrap—			
Tray lifters and sup- porters.	do	38	32	Wet processes	do	37	3
Trays	do	23	32	Vacuum	Railway-Brakes	63	34
Wall	do	14	32	(See Fluid-pressure, vacuum.)			
Wardrobe	do	20	32	Vacuum-pans	Sugar and Salt	155	6
Trunnions	Ordnance	22	22	Vacuum pumps. Steam and	Steam and Vacuum Pumps	227	18
Truss-bridges	Bridges	426	4	Valleys	Roofing	7	29
Trusses	Surgery	544	6	Valve-gear	Steam-Engines	355	18
T-square	Drafting	44	23	Valve-gear—			
Tube-clamps	Artesian and Oil Wells	132	25	Link	do	185	18
Tube-machines	Paper-Manufactures	17	17	Rod	do	63	18
Tube-machines—				Shifting-eccentric	do	185	18
Folders	do	15	17	Shifting-eccentric—			
Spiral-wind	do	16	17	Automatic	do	329	18
Straight-wind	do	44	17	Tripping cut-off	do	222	18
Tubes	Metal-Drawing	57	13	Valves	Pumps	210	9
Tubes and fines	Metal-Tube Manufacture	59	13	Valves and port-stoppers	Ships	31	22
Tubing	Steam-Boilers	251	18	Valves for inflation	Water-Distribution	31	9
Curved and spouts	Sheet-Metal Ware. Making	11	14	Vapor-baths	Baths and Closets	105	9
Grooving and seaming	do	33	14	Vapor-burners	Lamps and Gas-Fittings	418	30
Pipe-elbows. Making	do	64	14	Vapor-generators	Steam-Boilers	50	18
Straight. Making	do	62	14	Vaporizers	Electricity. Medical and Surgical	7	26
Tubing and packing	Artesian and Oil Wells	346	25	Varnishes—			
Tubular-cutter lathes	Wood-Turning	101	29	Alkali	Painting	23	31
Tubular saw	Wood-Sawing	64	29	Oil	do	111	31
Tack creasers and mark- ers.	Sewing-Machines	145	24	Processes and apparatus	do	45	31
Tacking-guides	do	84	24	Pyroxyline	do	71	31
Tugs	Harness	200	11	Tar	do	57	31
Tumbler-washers	Washing Apparatus	42	27	Vats	Hides, Skins, and Leather	54	31
Tumbling-drums	Hides, Skins, and Leather	47	31	Vats—			
Tuning-instrumente	Music	37	5	Apron	Bleaching and Dyeing	43	6
Tuning-pegs, violin	do	50	5	Closs	do	42	6
Tuning-pins, piano	do	20	5	Open	do	212	6
Tunnels	Hydraulic Engineering	67	4	Vault-covers	Paving	329	15
Tunnels—				Velocipedes	Railway Rolling-Stock	19	34
Excavators	do	16	4	Velocipedes—			
Shields	do	9	4	Bicycle attachments	do	6	34
Turbines				Geared	do	29	34
Bottom-supply	Hydraulic Motors	85	9	Vending devices, ribbon- holders.	Advertising	78	32
Side-ring supply	do	458	9	Venetian blinds	Curtains, Shades, and Screens	70	8
Top and side direct supply.	do	402	9	Ventilating	Ships	39	22
Top-ring supply	do	192	9	Ventilation—			
Turning fabrics	Sewing-Machines	47	24	Car	Pneumatics	347	28
Turners, leaf	Music	237	5	Grain	do	59	28
Turning—				House	do	292	28
Irregular forms	Metal Turning, Planing, and Milling.	19	13	Mine	do	30	28
Miscellaneous	do	301	13	Ventilators, window	do	155	28
Tapers	do	31	13	Vents	Lamps and Gas-Fittings	9	30
Wheels and axles	do	105	13	Vents and stoppers	Ordnance	8	22
Turnstiles	Fences	8	1	Vessels—			
Turn-tables	Railways	133	4	Angular bending	Sheet-Metal Ware. Making	62	14
Turpentine	Ammonia, Water, and Wood- Distillation.	9	31	Curved bending	do	36	14
Turpentine—				Die-seaming	do	140	14
Apparatus	do	37	31	Die-shaping	do	127	14
Gathering	Trees, Plants, and Flowers	20	1	Die-shaping—			
Processes	Ammonia, Water, and Wood- Distillation.	32	31	Fillers and forceers	do	22	14
Turrets	Ships	30	22	Roller-seaming	do	127	14
Twine-cutters	Cutlery	78	13	Wiring and danging	do	38	14
Twine-holders	Store-Furniture	64	8	Vestibule-cars	Railway Rolling-Stock	93	34
Twine-holders—				(See Cars, vestibule.)			
Take-up	do	25	8	Veterinary	Medicines	69	6
Take-up—				Veterinary	Surgery	167	6
Rotary	do	20	8	Veterinary—			
Twisting	Metal Bending	19	14	Horse-shields	do	21	6
Twisting-heads	Spinning	32	21	Vine-cutters, stalk chop- pers.	Harrows and Diggers	13	1
Tying-in warps	Weaving	22	21	Violin—			
Type-cases	Printing	92	17	Bows	Music	21	5
Type-machines	do	23	17	Bridges	do	26	5
Type-writer cabinets	Furniture	94	8	Chin-rests	do	30	5
Ullage-rods	Measuring-Instruments	14	23	Dampers and mutas	do	33	5
Ultramarine	Painting	9	31	Harmonic dampers	do	9	5
				Pianos	do	15	5
				Tailpieces	do	84	5
				Tuning-pegs	do	50	5

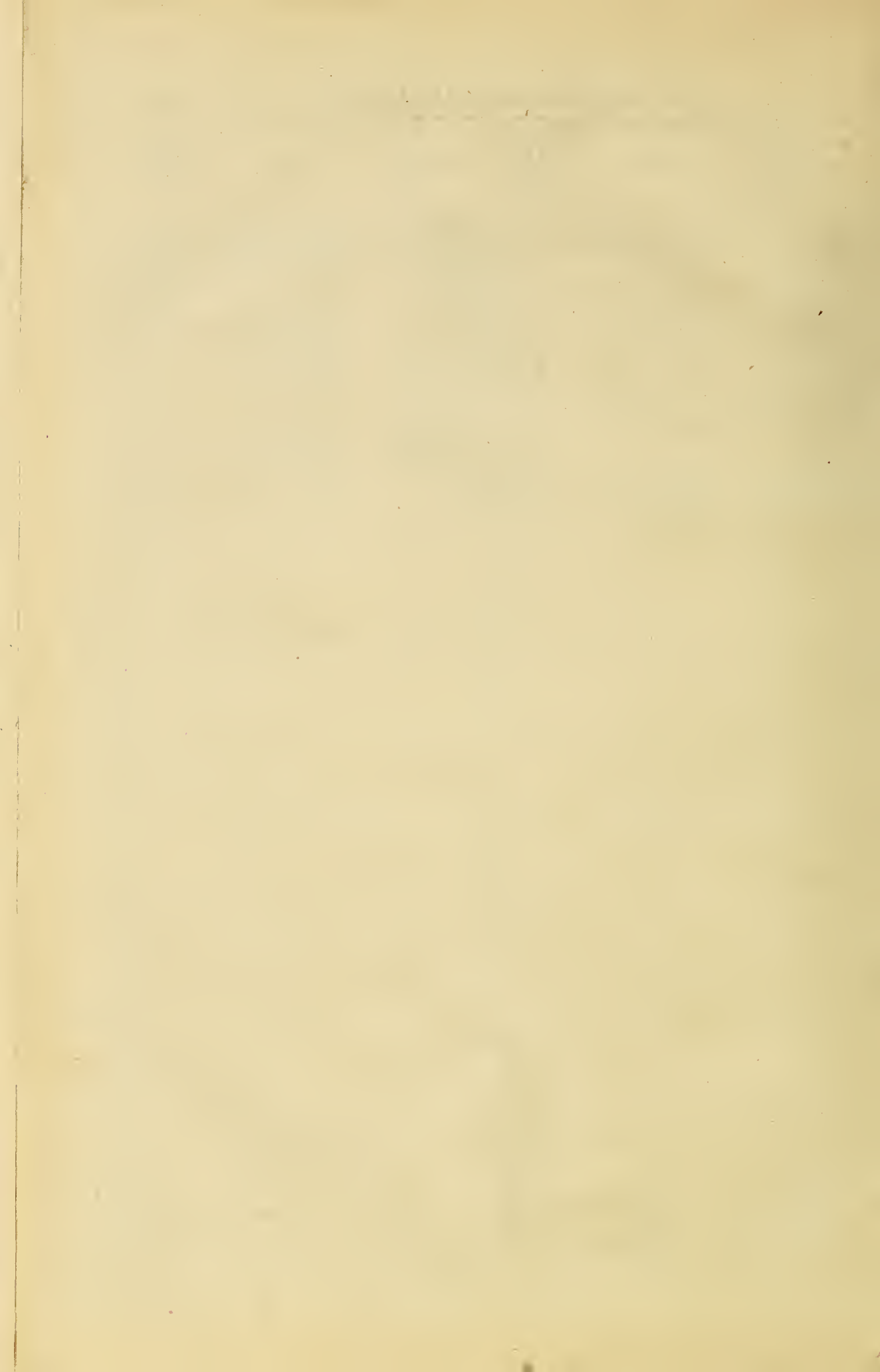
Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Viollins	Music	73	5	Water-tubes	Steam-Boilers	818	18
Viollins—				Wax	Oils, Fats, and Glue	30	31
Practice	do	4	5	Wax-thread	Sewing-Machines	181	24
Supports	do	12	5	Weather-boarding	Carpentry	33	29
Vices—				Weather-strips—			
Pipe and rod	Metal-Working Tools	75	14	Hinged	do	209	29
Smiths'	do	357	14	Hinged—			
Woodworkers'	do	90	14	Sills	do	79	29
Vocal exercising devices	Music	4	5	Packing	do	120	29
Voting-booths	Carpentry	35	29	Sliding	do	112	29
Voting-machines	Measuring-Instruments	63	23	Weather-vanes	Measuring-Instruments	12	23
Vulcanized fiber	Cacothone and Minor Plas- tics	36	15	Weaving, cross	Weaving	29	21
	do			Web	Driers	41	28
Vulcanizing apparatus	do	207	15	Weed-turners	Plows	60	1
Wadding	Carding	60	21	Weft-forks	Weaving	23	21
Waffle-irons	Stoves and Furnaces	34	19	Weighing	Coin-Controlled Apparatus	37	14
Wagon axles and boxes	Wagon, Car, and Track Irons	103	13	Weighing—			
Making				Recorders	do	13	14
Wagon-raisers	Hoisting	69	12	Weights	Measuring-Instruments	23	23
Wagon tires and fellies	Wagon, Car, and Track Irons	56	13	Weights—			
Making				Paper	Stationery	23	5
Walking-beams	Artesian and Oil Wells	82	25	Welding	Metal-Welding	30	13
Wall-protectors	Furniture	27	8	Wells—			
Walls—				Cleaning	Artesian and Oil Wells	55	25
Composite	Masonry	13	4	Drilling and boring	do	401	25
Hollow tile	do	12	4	Wharves	Hydraulic Engineering	8	4
Wardrobes	Furniture	43	8	Wheel and rail	Railway-Brakes	23	34
Wardrobes—				Wheel and rail—			
Knockdown	do	29	8	Chock block	do	64	34
Warping	Cordage	116	21	Wheel-attaching devices	Railway Rolling-Stock	70	34
Warping reeds	do	6	21	(See A xles.)			
Warp-stop motions	do	52	21	Wheelharrows	Carriages and Wagons	153	10
Washbenches	Laundry	55	27	Wheel-bodies—			
Washboards	do	231	27	Cast in tires	Railway Rolling-Stock	16	34
Washboilers	do	409	27	Cast on hubs	do	6	34
Washing-machines—				Wheeled toys	Games and Toys	87	7
Agitator	do	228	27	Wheel-fenders	Railway Rolling-Stock	38	34
Boiler	do	194	27	Wheel-fenders—			
Combined washing and wringing	do	44	27	Car and truck equalizers	do	9	34
Cylinder	do	215	27	Combined-brake	do	20	34
Miscellaneous	do	67	27	Fixed-scoop	do	10	34
Pounder	do	713	27	Folding, hinged-scoop	do	32	34
Reciprocating-rubber	do	820	27	Hinged-scoop	do	24	34
Rocking and swinging	do	147	27	Inclined, tilt-up front	do	19	34
Roller	do	113	27	Obstacle-projectors	do	13	34
Roller and bed	do	493	27	Pilot type	do	50	34
Rotary-rubber	do	239	27	Rotary, positively- driven	do	22	34
Washstands	Furniture	83	8	Trip and drop scoop	do	29	34
Washstands—				Trip and shoot forward	do	11	34
Reservoir	do	26	8	Wheeled-scoop	do	16	34
Washtubs	Laundry	33	27	Wheel-tread	do	50	34
Watch-balances	Horology	102	23	Wheel-harrows	Harrows and Diggers	189	1
Watch-barrels	do	51	23	Wheel-harrows—			
Watchcases	do	344	23	Disk	do	12	1
Watchcase-springs	do	97	23	Spring	do	70	1
Watch-chain attachments	Jewelry	84	5	Trailing teeth	do	29	1
Watch dust-caps	Horology	42	23	Wheels	Carriages and Wagons	646	10
Watches	do	120	23	Wheels—			
Watches and clocks	Metal Personal Ware. Mak- ing	165	14	Bushings	Railway Rolling-Stock	6	34
Watch-keys	Horology	112	23	Counterbalances	do	4	34
Watchmakers' lathes	Metal Turning, Planing, and Milling	151	13	Epicyclic	do	4	34
Watchmakers' tools	Horology	174	23	Flanges, independent movement	do	9	34
Watch-plates	do	36	23	In channels	Marine Propulsion	15	22
Watch-regulators	do	120	23	Integral—			
Watch-stops	do	103	23	Cast	Railway Rolling-Stock	39	34
Watch-winding	do	52	23	Cast—			
Water	Ammonia, Water, and Wood- Distillation	69	31	Hollow webs	do	54	34
				Roller-bearings	do	13	34
Water	Gas	184	31	Spokes—			
Water and air	Safes	34	20	Cast in	do	20	34
Water-closet and sewer ventilation	Baths and Closets	119	9	Metallic, detachable	do	16	34
Water-closet attachments	do	240	9	Wooden	do	7	34
Water-closets—				Spring	Carriages and Wagons	51	10
Plunger	do	81	9	Tire-fasteners	Railway Rolling-Stock	29	34
Siphon	do	99	9	Tire-fasteners—			
Valved	do	270	9	Bolted lap-flanges	do	21	34
Washout	do	52	9	By casting	do	5	34
Water-closet valves	do	139	9	Integral lugs	do	12	34
Water-coolers	Refrigeration	282	28	Transverse interme- diate keys	do	8	34
Water-elevators				Tires—			
Compressed-air	Pumps	123	9	Cushioned—			
Windlass	do	314	9	Metallic springs	do	5	34
Water fire-boxes	Safes	316	18	Rubber	do	65	34
Water-gages	Measuring-Instruments	157	23	Wooden blocks	do	10	34
Water-gages—				Loose	do	6	34
Float	do	82	23	Non-metallic	do	13	34
Water-gates—				Roller-supported	do	13	34
Sliding	Hydraulic Engineering	39	4	Web			
Swinging	do	61	4	Sheet-metal disks	do	35	34
Waterproofing and sizing	Paper-Making	279	15	Sheet-metal disks—			
Water, purifying	Chemicals	75	6	Non-metallic filling	do	29	34
Water-supply hose-hold- ers	Water-Distribution	61	9	Single	do	6	34
				Split castings, detach- able tires	do	14	34
Water-tube, coil	Steam-Boilers	168	18	Wooden	do	13	34

SUB-CLASSES ALPHABETICALLY ARRANGED.

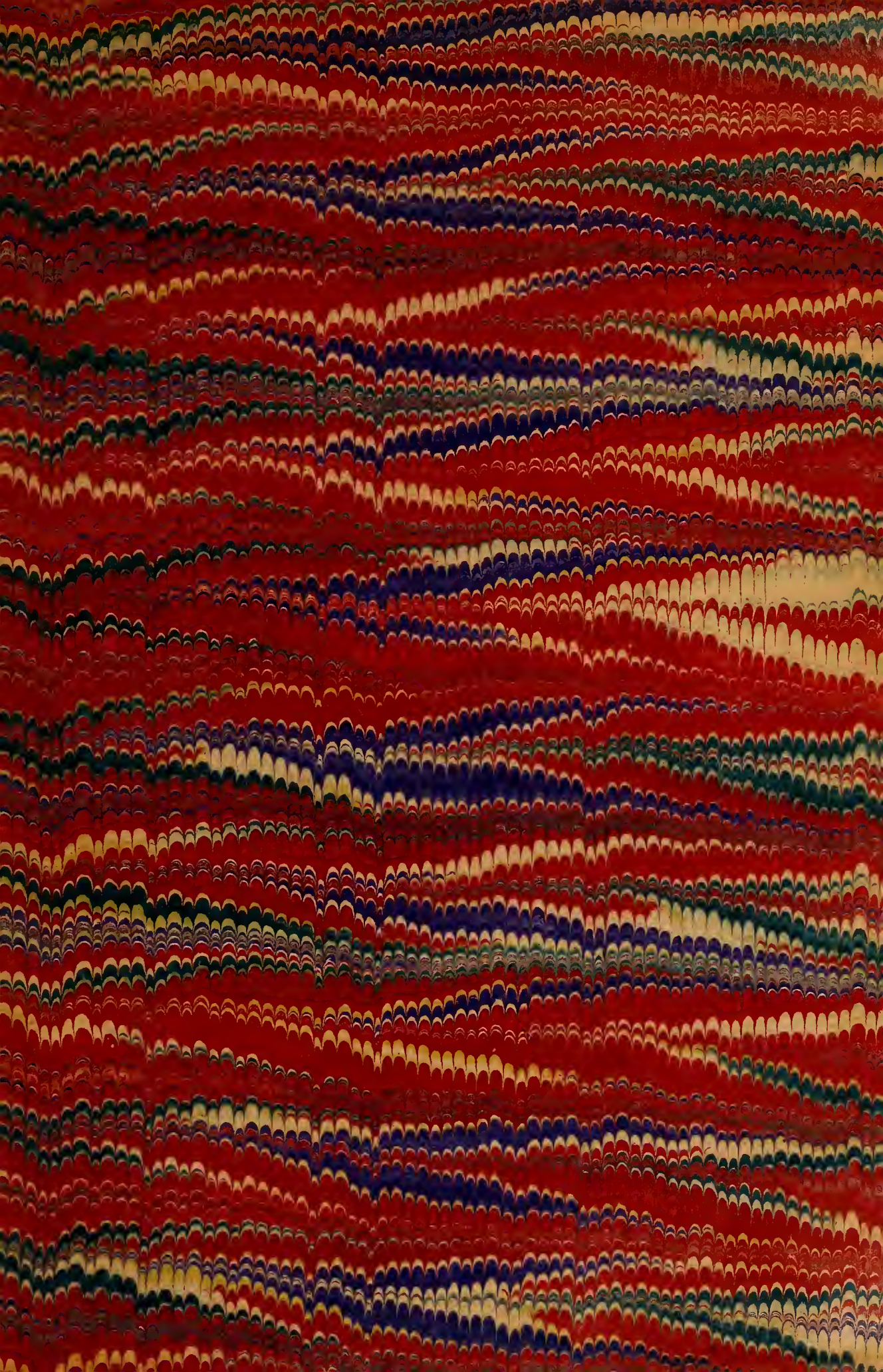
Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Wheels—				Wire fences—			
Webs and tires, pressed-steel.	Railway Rolling-Stock	16	34	Stays	Fences	42	1
Wheel tread-surfaces	do	11	34	Stays—			
Form	do	10	34	Linked	do	22	1
Multiple	do	12	34	Lock-plates	do	16	1
Peripheral rollers	do	5	34	Strands	do	31	1
Recessed	do	9	34	Wire gates	do	41	1
Wheelwright-machines	Wheelwright-Machines	79	29	Wire gates—			
Whiffletree-hooks	Carriages and Wagons	421	10	Frameless	do	32	1
Whiffletrees	do	436	10	Wire-pointing	Metal-Forging	66	13
Whips	Harness	300	11	Wire-reels	Metal-Drawing	94	13
Whip-sockets	do	200	11	Wire-shears	Cutlery	26	13
Wick-pickers	Lamps and Gas-Fittings	10	30	Wire-stretchers—			
Wick-raisers, flat	do	51	30	Permanent	Fences	18	1
Wicks	do	77	30	Permanent—			
Wick-trimmers	Cutlery	48	13	Compensators	do	51	1
Wind-chests, organ	Mnsic	3	5	Mid-wire take-ups	do	48	1
Winding	Clot-Finishing	54	21	Path-closers	do	13	1
Winding	Silk	38	21	Post-winders	do	80	1
Winding	Wire-Working	19	14	Post-winders—			
Winding-axle	Railway-Brakes	27	34	Vertical	do	21	1
Winding-balls	Cordage	25	21	Removable	do	32	1
Winding-bobbins—				Removable—			
Sewing-machine shuttle	do	107	21	Clutch-bars	do	10	1
Warp-wind	do	128	21	Grips	do	36	1
Weft-wind	do	76	21	Levers	do	52	1
Winding-heddle and seine-needles	do	4	21	Levers—			
Winding-drum	Railway-Brakes	64	34	Attached	do	20	1
Winding, pneumatic shift	do	8	34	Loopers	do	30	1
Winding-spools	Cordage	27	21	Rack-bars	do	6	1
Winding tating-shuttles	do	4	21	Ratchet-bars	do	34	1
Windlasses. Capstans and	Hoisting	78	12	Reel-carriers	do	124	1
Windlass water-elevators	Pumps	314	9	Screw	do	10	1
Window and door buttons	Builders' Hardware	253	20	Tongs	do	16	1
Window and door buttons—				Twin-hooks	do	8	1
Automatic	do	91	20	Windlasses	do	71	1
Screw	do	16	20	Wiring—			
Sliding bolts	do	51	20	Blinds	Woodworking-Machines	45	29
Strips	do	6	20	Bottles and corks	Wire-Working	30	14
Trippers	do	32	20	Brushes and cards	do	37	14
Vertically-swinging	do	84	20	Wood	do	13	14
Window and plate glass	Glass	68	15	Wood—			
Window—				Fences	do	166	14
Bead-fasteners	Builders' Hardware	40	20	Fences—			
Chairs	Carpentry	98	29	Gear	do	48	14
Cleaners	Brushing and Scrubbing	56	27	Rack-bar	do	30	14
Cornices	Curtains, Shades, and Screens	72	8	Sprocket	do	86	14
Gardens	Trees, Plants, and Flowers	43	1	Fencing	do	116	14
Guards	Carpentry	67	29	Wood	Ammonia, Water, and Wood-Distillation	58	31
Openers	Fences	14	1	Wood—			
Sashes	Carpentry	107	29	Gas			
Sashes—				Paving			
Sliding	do	88	29	Wood			
Sliding and swinging	do	135	29	Curved surfaces	Grinding and Polishing	84	27
Swinging	do	66	29	Plane surfaces	do	106	27
Screens	Curtains, Shades, and Screens	214	8	Wooden articles	Coopering	27	29
Screens—				Wooden barrels	Packing and Storing Vessels	93	32
Exits	do	48	8	Wooden barrels—			
Extensible	do	101	8	Bent	do	63	32
Rolling	do	123	8	Bungs	do	112	32
Shades	do	35	8	Bungs and vents	do	137	32
Ventilators	Pneumatics	155	23	Bungs and vents—			
Windows	Carpentry	66	29	Expanding	do	24	32
Windows	Iron Structures	21	4	Piling	do	36	32
Windows—				Bung-wrenches	do	24	32
Car	Carpentry	49	29	Closures	do	176	32
Wind-wheels—				Closures—			
Horizontal	Wind-Wheels	336	28	Screw and bayonet	do	24	32
Oscillating	do	12	28	Compartment	do	19	32
Vertical feathering-blades	do	364	28	Covers	do	71	32
Vertical solid-wheel	do	617	28	Heads	do	56	32
Wine-coolers	Refrigeration	27	28	Hoops	do	154	32
Wines	Alcohol	18	31	Knockdown	do	33	32
Wipers	Coating with Metal	31	3	Linings and coverings	do	33	32
Wire	Metal-Drawing	60	13	Stands	do	128	32
Wire-covering	do	16	13	Ventilating	do	24	32
Wire fabric	Fences	49	1	Wooden boxes	do	67	32
Wire fabric, &c., ornamental	Jewelry	28	5	Wooden boxes—			
Wire-fasteners	Fences	18	1	Bent	do	55	32
Wire-fasteners—				Bent—			
Clamps	do	20	1	Closures	do	34	32
Hook-nails and staples	do	40	1	Single-blank	do	38	32
Wire fences	do	133	1	Block	do	22	32
Wire fences—				Can and bottle cases	do	93	32
Picket	do	104	1	Can and bottle cases—			
				Vial-cases	do	40	32
				Cell-cases	do	58	32
				Cell-cases—			
				Cloth or cord	do	26	32
				Paper	do	145	32
				Paper boxes	do	33	32
				Wood	do	39	32
				Wood-veneer	do	32	32
				Closures	do	93	32
				Compartment	do	68	32
				Crates	do	66	32

*Réfusse.

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Wooden boxes—				Wool-cleaning	Bleaching and Dyeing	50	6
Crates—				Wool oiling	Carding	37	21
Fruit-boxes	Packing and Storing Vessels	35	32	Wool-washing machines.	Washing Apparatus	124	27
Hat	do	22	32	Work-benches	Woodworking-Tools	56	29
Package	do	27	32	Work-boxes	Apparel	85	24
Poultry	do	14	32	Work-holders	do	28	24
Crates and boxes—				Work-holders	Painting	33	31
Folding	do	61	32	Working rattan	Woodworking-Machines	53	29
Folding—				Wrappers	Tobacco	8	2
Poultry	do	73	32	Wrapping-machines	Paper-Manufactures	54	17
Knockdown	do	67	32	Wrenches	Tools and Implements.	33	13
Linings and coverings	do	34	32		Making		
Powders. Cases for ..	do	41	32	Wringer-rolls	Laundry	90	27
Stays, corner	do	43	32	Wringers	do	484	27
Straps	do	51	32	Wrist-pin turners	Metal Turning, Planing, and	31	13
Toilet and silverware	do	20	32		Milling.		
Wooden pins. Making ..	Woodworking-Machines.	26	29	Writing-tablets	Bookbinding	96	5
Wooden trays. Making ..	do	27	29	Writing-tablets—			
Wooden vessels—				Continuous	do	50	5
Baskets	Packing and Storing Vessels	160	32	Manifolding	do	69	5
Baskets—				Wrought-nail making...	Nails and Spikes	171	13
Covered	do	67	32	Yards and plants	Railways	19	4
Folding	do	18	32	Yarn-controllers	Spinning	94	21
Wooden walls	Carpentry	28	29	Yarn guides and clearers.	Cordage	69	21
Wood-grinders	Paper-Making	203	15	Zinc salts	Painting	34	31
Wood ornamentation ..	Woodworking-Machines...	73	29	Zithers	Music	14	5
Wood saturation	Preserving	287	6	Zithers—			
Wood-screw machines...	Metal Bolts, Nuts, Rivets,	184	13	Keyed	do	6	5
	and Screws.			Picks	do	4	5







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